ACOUSTICAL ANALYSIS REPORT

Borrego Springs 50
Palm Canyon Drive and Hoberg Road
Borrego Springs, California 92004

County of San Diego Tentative Map No 5511

Prepared For

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1.0 EXECUTIVE SUMMARY

The project, known as Borrego Springs 50, proposes to subdivide approximately 50.69 acres into 17 residential lots each being a minimum of 2.0 acre net and one 11.60 acre commercial lot. The project site is located on the northwest corner of the intersection of Palm Canyon Drive and Hoberg Road in the unincorporated area of Borrego Springs, County of San Diego, California.

A review of the surrounding developments in the community, along with the geographic and topographic site conditions show that automobile traffic noise from San Diego County Road S22, which in the vicinity of the project site consists of Montezuma Valley Road and the section of Palm Canyon Drive east of Hoberg Road, predominantly accounts for the noise environment in the vicinity of the project. The current calculated on-site traffic noise level at the southeast corner of the property site is 61.8 Community Noise Equivalent Level (CNEL). Due to an increase in traffic volumes along Palm Canyon Drive and Montezuma Valley Road the calculated future (2030) traffic noise at the same location increases to 65.4 CNEL.

Without mitigation, future traffic noise levels at the center of the first level of the proposed housing envelopes range from 25.8 CNEL at Lot 1 in the northeast section of the property to 37.3 CNEL at Lot 12 in the southeast corner of the property. The County of San Diego Noise Element of the General Plan states that exterior noise levels at the residential outdoor use areas, caused by traffic or other sources, must not exceed 60 CNEL. Calculations show that future traffic noise impacts at the first level of the center of the proposed building envelopes will not exceed 60 CNEL. Therefore, no mitigation is required.

The State Building Code, Policy 4B of the County of San Diego Noise Element (part VIII) of the current San Diego County General Plan and other agencies (such as HUD) state that interior noise levels shall not exceed 45 CNEL and adheres to the accepted rule that an exterior wall provides a minimum reduction of 15 CNEL to the interior room. Where exterior noise levels at building facades exceed 60 CNEL, an acoustic study is required to determine if unmitigated future interior noise levels in habitable spaces will achieve noise levels below 45 CNEL. Without mitigation, future traffic noise levels at the center of the second level of the proposed residential lots range from 27.0 CNEL at Lot 2 to 40.8 CNEL at Lot 12. Since calculations show that future traffic noise impacts at the first and second levels of the center of the proposed lots will not exceed 60 CNEL, no exterior to interior analysis will be required.

2.0 INTRODUCTION

This acoustical analysis report is submitted to satisfy the acoustical requirements of the County of San Diego for Tentative Map (TM 5511) approval. Its purpose is to assess noise impacts from nearby roadway traffic and to identify project features or requirements necessary to maintain project site outdoor recreational use noise levels of 60 CNEL or less, as required by the County of San Diego Noise Element of the General Plan.

All noise level or sound level values presented herein are expressed in terms of decibels, with A-weighting to approximate the hearing sensitivity of humans. The CNEL is a 24-hour average, where sound levels during evening hours of 7:00 p.m. to 10:00 p.m. have an added 5 dB weighting, and sound levels during nighttime hours of 10:00 p.m. to 7:00 a.m. have an added 10 dB weighting.

This is similar to the Day-Night sound level, L_{DN}, which is a 24-hour average with an added 10 dB weighting on the same nighttime hours but no added weighting on the evening hours. Sound levels expressed in CNEL are always based on the A-weighted decibel. These metrics are used to express noise levels for both measurement and municipal regulations, for land use guidelines, and for enforcement of noise ordinances. Further explanation can be provided upon request.

Time-averaged noise levels are expressed by the symbol L_{EQ}; unless a different time period is specified, L_{EQ} is implied to mean a period of one hour. Some of the data may also be presented as octave-band-filtered and/or A-octave-band-filtered data, which are a series of sound spectra centered about each stated frequency, with half of the bandwidth above and half of the bandwidth below each stated frequency.

2.1 Project Location

The project site is located at the northwest corner of the intersection of Palm Canyon Drive and Hoberg Road in the unincorporated area of Borrego, County of San Diego, California. The Assessor's Parcel Number (APN) for the property is 141-080-05. The overall property is rectangular in shape with an approximate area of 50.69 gross acres. For more information regarding the project, please see Appendix A: County of San Diego Scoping Letter, Dated September 21, 2006

Currently, the project site is undeveloped. The project location is shown on the Vicinity Map, Figure 1, following this report. An Assessor's Parcel Map, Satellite Aerial Photograph, Topographic Map, and Planned Land Use Map of this area are also provided as Figures 2 through 4.

2.2 Project Description

The project proposes to subdivide approximately 50.69 acres into 17 residential lots each being a minimum of 2.0 acre net and one 11.60 acre commercial lot. The northerly 2,740 feet of the site comprises approximately 38 acres and is zoned RS1, one single family residence per acre. The southerly 940 feet, approximately 11.60 acres, is zoned C42, Visitor Serving Commercial. The project is a lot sale. The project property is currently undeveloped.

3.0 ENVIRONMENTAL SETTING

3.1 Existing Noise Environment

The primary noise source in the vicinity of the project site is traffic noise from San Diego/Imperial County Route S22. In the vicinity of the project site, this county route consists of the section of Palm Canyon Drive east of Hoberg Road and Montezuma Valley Road.

The section of Palm Canyon Drive west of Hoberg Road, which runs along the southern edge of the project, carries local traffic. Its impact to the project site is small due to low traffic volume, but it is included in the calculations.

Hoberg Road, which runs along the eastern edge of the project, carries local traffic to the immediate surrounding of the road. The road begins at the corner of Montezuma Valley Road and Palm Canyon Drive and is a continuation of Montezuma Valley Road. However, since San Diego/Imperial County Route S22 is the primary traffic source, traffic from Montezuma Valley does not continue onto Hoberg road, instead it follows County Route S22 onto Palm Canyon Drive. Hoberg Road is a

Non-Circulation Element Road and no traffic data is available for this road. Due to its low traffic volume, its impact to the project site is negligible. It is not included in the calculations.

There are two MTS bus routes, 891/892, with a stop on the southeast corner of Montezuma Valley Road and Palm Canyon Drive. However, these bus routes only operate on Thursday and Saturday and have 8 scheduled stops per day. Due to the infrequency of the stops, bus stop noise is determined to be negligible with no penalties applied. Bus schedule is included in Appendix B: Relevant Traffic Information.

Borrego Valley Airport is located east of the site location. Its noise impact is negligible because the project site location is 3 miles from the airport influence area.

No other noise source is considered significant.

3.1.1 Vehicle Traffic Noise

Montezuma Valley Road is a two-lane, two-way road running north-south in the vicinity of the project site and is a part of County Route S22. The paved roadway width is 33-feet, curb to curb. The speed limit is 45 mph. According to the San Diego Association of Governments Department of Transportation (SANDAG) Website (http://maximus.sandag.org/tfic/trfic30.html), Montezuma Valley Road in the vicinity of the project site carries a current (2000) traffic volume of approximately 2,000 Average Daily Trips (ADT). According to the specifications listed in the current San Diego Circulation Element, the road is a Light Collector Road. The design speed for a Light Collector Road is 45 mph.

The section of Palm Canyon Drive east of Hoberg Road is a two-lane, two-way road with a continuous turn lane running east-west in the vicinity of the project site and is a part of County Route S22. The paved roadway width is approximately 50-feet, curb to curb. The posted speed limit is 45 mph. According to the SANDAG website, this section of road currently carries a traffic volume of approximately 3,000 ADT in the vicinity of the project site. According to the specifications listed in the current San Diego Circulation Element, the road is a Light Collector Road. The design speed for a Light Collector Road is 45 mph.

The section of Palm Canyon Drive west of Hoberg Road is a two-lane, two-way road running east-west along the southern edge of the project site. The paved roadway width is approximately 25-feet, curb to curb. The SANDAG website does not give traffic volumes for this section of the road, nor do the complete machine counts for Palm Canyon Drive provided by Nick Ortiz, County of San Diego traffic engineer, include any relevant information (see Appendix B: Relevant Traffic Information for complete counts). However, since the initial site visit showed some contribution from this section of the road, its classification as a Non-Circulation Element Residential Road and accompanying level of service tables from the County of San Diego Circulation Element was used for this study to supply the traffic volume of 1,500 ADT at LOS C. The posted speed limit is 45 mph

The current calculated on-site traffic noise level at the southeastern corner of the project site is 61.8 CNEL. Current and future (see 3.2) traffic volumes for the roadway sections near the project site are shown in Table 1. For further roadway details and current ADT traffic volumes, please refer to Appendix C: Relevant Analysis and Test Result.

Table 1. Overall Roadway Traffic Information				
Roadway Name	Speed Limit (mph)		Current (2000) ADT	Future (2030) ADT
	Current	Future		
Montezuma Valley Road	45	45	2,000	5,000
Palm Canyon Drive (East of Hoberg Road)	45	45	3,000	6,520
Palm Canyon Drive (West of Hoberg Road)	45	45	1,500	1,500

Traffic composition information for Montezuma Valley Road and Palm Canyon Drive was not readily available. Following research on neighboring and surrounding land use, roadway classification and application of our professional experience during our on-site study, percentages of 2.5% medium and 0.5% heavy truck traffic were uniformly applied to Montezuma Valley Road and the section of Palm Canyon Drive east of Hoberg Road. Percentages of 0.5% medium and 0.5% heavy truck traffic were uniformly applied to the section of Palm Canyon Drive west of Hoberg Road.

The noise environment at the project site is primarily the result of vehicle traffic on San Diego/Imperial County Road S22, which consists of Montezuma Valley Road and the section of Palm Canyon Drive east of Hoberg Road. A minor contribution from the section of Palm Canyon Drive west of Hoberg Road is also considered.

Without mitigation or proposed project structures, the current 60 CNEL traffic contour runs parallel to the centerline of Palm Canyon Drive approximately 20-feet to the north. As the contour nears the intersection with Hoberg Road/Montezuma Valley Road it curves slightly north. The 55 CNEL noise contour is similarly located 54-feet from the Palm Canyon Drive centerline. The 50 CNEL noise contour is located approximately 107-feet from the Palm Canyon Drive centerline. The 60, 55 and 50 CNEL contours all lie on the southern section of the property which is designated for future commercial use. For a graphical representation of these contours, please refer to Figure 6a: Preliminary Grading Plan Showing Current Traffic CNEL Contours and Noise Measurement Location and Figure 6b: Detail of Preliminary Grading Plan Showing Current Traffic CNEL Contours and Noise Measurement Location.

3.1.2 Measured Noise Level

An on-site inspection and traffic noise measurement were made on the morning of Tuesday, January 9, 2007. Noise levels were calculated for the site using the methodology described in Section 4.1. The weather conditions were as follows: clear skies, low humidity, and temperature in the mid 80's with winds from the south at 2-3 mph. A "one-hour" equivalent measurement was made at the southeast corner of the project site (near the intersection of Palm Canyon Drive and Hoberg Road). The microphone was mounted on a tripod and fixed approximately five feet above the existing project site grade.

Traffic volumes for Palm Canyon Drive, Montezuma Valley Road and Hoberg Road were recorded for automobiles, medium-size trucks, and large trucks during the measurement period. After a continuous 15-minute sound level measurement, no changes in the L_{EQ} were observable and the measured result was documented. The measured noise level and related weather conditions are

found in Table 2. The calculated equivalent hourly vehicle traffic count adjustment and a complete tabular listing of all traffic data recorded during the on-site traffic noise measurement are found in Appendix B: Relevant Analysis and Test Result.

Table 2. On-Site Noise Measurement Conditions and Results	
Date	Tuesday, January 9, 2007
Time	12:15 p.m. to 12:45 p.m.
Conditions	Clear Skies, winds from the south @ 2-3 mph, temperature in the mid 80's with low humidity
Measured Noise Level	59.3 dBA L_{EQ}

3.1.3 Calculated Noise Level

The calculated noise levels (L_{EQ}) were compared with the measured on-site noise level to determine if adjustments or corrections (calibration) should be applied to the traffic noise prediction model in the Traffic Noise Model software (TNM). Adjustments are intended to account for site-specific variances in overall reflectivity or absorption, which may not be accurately represented by the default settings in the model.

The measured noise level of 59.3 dBA L_{EQ} at the southeast corner of the project site was compared to the calculated (modeled) noise level of 59.9 dBA L_{EQ} for the same weather conditions and traffic flow. As there was a difference of only 0.6 dBA between the measured and the calculated noise level, no adjustment was deemed necessary to model future noise levels for this location. Please refer to Table 3 for further summary.

Table 3. Calculated versus Measured Traffic Noise Data				
Calibration Receiver Position	**Calculated**	**Measured**	**Difference**	**Correction**
Southeast Corner of Project Site	59.9 dBA L_{EQ}	59.3 dBA L_{EQ}	0.6 dB	None

3.2 Future Noise Environment

According to the proposed San Diego County General Plan for 2020 the classification of Montezuma Valley Road in the vicinity of the project site will change from its current classification to a two-lane 2.2D Light Collector with Improvement Options which, according to the description in the proposed circulation element road standards, is similar to the existing Rural Collector Road classification. The 2.2D Light Collector will have a speed design of 40 mph. The proposed 2020 General Plan also states the section of Palm Canyon Drive east of Hoberg Road will change to a two-lane 2.2A Light Collector with Raised Median, which is similar to the existing Town Collector Road classification. The 2.2A Light Collector will have a speed design of 40 mph. The General Planning board members are in agreement and the community supports this change in classification. According to the same general plan, traffic volumes along the Montezuma Valley Road will increase to 4,800 ADT for 2030. The section of Palm Canyon Road east of Hoberg Road will increase to 6,520 ADT. This information is in Appendix C: County of San Diego Roadway Classification Changes and is also available in the "Board of Supervisors Hearing - August 2, 2006: Proposed Changes to Circulation Element Road Network and Framework"

(www.sdcounty.ca.gov/cnty/cntydepts/landuse/planning/GP2020/pubs/pc_jul06/c_borrego.pdf) on C-287, classification change; C-283 board consensus; and C-284, predicted future ADT.

However, since this plan has not yet been officially adopted by the County of San Diego, Richard Chin, traffic engineer for the County of San Diego, has advised that the current published roadway classifications be used. Therefore, the current speed design of 45 mph for Montezuma Valley Road and Palm Canyon Drive will be used. The alignment and roadbed grade elevations are expected to remain the same for these roadways.

According to the SANDAG website, the traffic volume for the east-west section of Montezuma Valley Road will increase to 5,000 ADT for 2030. To ensure a worst-case scenario, the higher traffic volumes for Montezuma Valley Road obtained from SANDAG are used in the calculations.

According to the SANDAG website, the future (year 2030) traffic volume for the section of Palm Canyon Drive east of Hoberg Road is projected to increase to 6,000 ADT. To ensure a worst-case scenario, the higher traffic volumes obtained from 2020 General Plan (6,520 ADT) are used in the calculations.

There is no information available regarding future traffic volumes for the section of Palm Canyon Drive, so its classification as a Non-Circulation Element Residential Road and accompanying level of service tables from the County of San Diego Circulation Element was used for this study to supply the traffic volume of 1,500 ADT at LOS C. The posted speed limit of 45 mph is expected to remain the same.

The same truck percentages from the existing traffic volumes were used for future traffic volume modeling. For further roadway details and projected future ADT traffic volumes, please refer to Appendix B: Relevant Analysis and Test Result.

The future noise environment at the project site is primarily the result of vehicle traffic traveling on San Diego/Imperial County Route S22 which, in the vicinity of the project site, consists of the section of Palm Canyon Drive east of Hoberg Road and Montezuma Valley Road. A minor contribution from the section of Palm Canyon Drive west of Hoberg Road is also considered. The future calculated on-site traffic noise level at the southeastern corner of the project site is 65.4 CNEL.

Without mitigation or proposed project structures, the future 60 CNEL traffic contour runs parallel to the centerline of Palm Canyon Drive approximately 22-feet to the north. As the contour nears the intersection with Hoberg Road/Montezuma Valley Road it curves slightly north. The 55 CNEL noise contour is similarly located 75-feet from the Palm Canyon Drive centerline. The 50 CNEL noise contour is located approximately 115-feet from the Palm Canyon Drive centerline. The 60, 55 and 50 CNEL contours all lie on the southern section of the property which is designated for future commercial use. For a graphical representation of these contours, please refer to Figure 7a: Preliminary Grading Plan Showing Future Traffic CNEL Contours and Noise Measurement Location and 7b: Detail of Preliminary Grading Plan Showing Future Traffic CNEL Contours and Noise Measurement Location.

4.0 METHODOLOGY AND EQUIPMENT

4.1 Methodology

4.1.1 Field Measurement

Typically, a "one-hour" equivalent sound level measurement (L_{EQ}, A-Weighted) is recorded for at least one noise-sensitive location on the site. During the on-site noise measurement, start and end times are recorded, vehicle counts are made for cars, medium trucks (double-tires/two axles), and heavy trucks (three or more axles) for the corresponding road segment(s). Supplemental sound measurements of one hour or less in duration are often made to further describe the noise environment of the site.

For measurements of less than one hour in duration, the measurement time must be long enough for a representative traffic volume to occur and the noise level (L_{EQ}) to stabilize; 15 minutes is usually sufficient for this purpose. The vehicle counts are then converted to one-hour equivalent volumes by applying an appropriate factor.

Other field data gathered include measuring or estimating distances, angles-of-view, slopes, elevations, roadway grades, and vehicle speeds. This information is subsequently verified using available maps and records.

4.1.2 Roadway Noise Calculation

The Traffic Noise Model software, TNM Version 2.5 released in February 2004 by the U. S. Department of Transportation was used for all traffic modeling in the preparation of this report. TNM calculates the daytime average Hourly Noise Level (HNL) from traffic data including road alignment, elevation, lane configuration, projected traffic volumes, estimated truck composition percentages and vehicle speeds. The HNL is equivalent to the L_{EQ}, and may be converted to CNEL by the addition of 2.0 decibels, as suggested in the Wyle Laboratories Study (see reference).

The daytime average hourly traffic volume, evaluated from Average Weekday Trips (AWT) data as shown in the Wyle Study to be simply 5.8% of AWT, is then applied to models in TNM. Current and future CNEL is calculated for predetermined receiver locations. Further explanation can be supplied on request.

4.2 Measurement Equipment

Some or all of the following equipment was used at the site to measure existing noise levels:

- Larson Davis Model 720 Sound Level Meter, Serial # 0110
- Larson Davis Model CAL150 Calibrator, Serial # 2520
- Windscreen
- Tripod
- Distance Measurement wheel and Compass
- Digital camera
- Portable Anemometer
- Digital Thermometer

The sound level meter was field-calibrated prior to and following the noise measurement to ensure accuracy. All sound level measurements conducted and presented in this report, in accordance with the regulations, were made with a sound level meter that conforms to the American National Standards Institute specifications for sound level meters ANSI SI.4-1983 (R2001). All instruments are maintained with National Bureau of Standards traceable calibrations, per the manufacturers' standards.

5.0 EXTERIOR IMPACTS AND MITIGATION

5.1 Exterior

Policy 4B of the County of San Diego Noise Element (part VIII) of the current San Diego County General Plan states that exterior noise levels shall not exceed 60 CNEL at residential outdoor usable areas. Calculations show that without mitigation, future traffic noise levels at the first level of the center of each proposed building envelope will range from 25.8 CNEL at Lot 1 in the northeast section of the property to 37.3 CNEL at Lot 12 in the southeast corner of the property. Mitigation to provide an exterior noise level below 60 CNEL will not be required. Table 4 gives a full list of CNEL values at the first level of the center of each proposed building envelope. For a graphical representation, please refer to Figure 8: Preliminary Grading Plan Showing Future Traffic CNEL Impacts at Center of Proposed Building Envelopes.

Table 4. Calculated Future Traffic Noise Impacts at First Level Center of Proposed Building Envelopes

Receiver	Receiver Location	Traffic CNEL
R-1	Lot 1	25.8
R-2	Lot 2	25.9
R-3	Lot 3	27.0
R-4	Lot 4	27.6
R-5	Lot 5	29.6
R-6	Lot 6	32.1
R-7	Lot 7	33.3
R-8	Lot 8	32.5
R-9	Lot 9	33.0
R-10	Lot 10	34.9
R-11	Lot 12	37.3
R-12	Lot 13	35.4
R-13	Lot 14	32.9
R-14	Lot 15	31.6
R-15	Lot 16	31.2
R-16	Lot 17	29.4
R-17	Lot 18	29.5

5.2 Second Story Future Traffic Noise Levels

The State Building Code, Policy 4B of the County of San Diego Noise Element (part VIII) of the current San Diego County General Plan and other agencies (such as HUD) require an acoustical analysis for any residential facilities proposed in an area which has or will have a noise level in excess of 60 CNEL. The regulations also state that if exterior noise levels cannot be reduced to 60 CNEL, then an exterior-to-interior noise study must be conducted to demonstrate building features and mitigation which will provide interior noise levels of 45 CNEL or less for residential units, or other habitable interior areas.

Calculations show that the noise impacts at the center of the second level of each proposed building envelope range from 27.0 CNEL at Lot 2 to 40.8 CNEL at Lot 12. See Table 5 for second story calculated noise levels. For a graphical representation, please refer to Figure 8: Site Plan Showing Future Traffic CNEL Impacts at Center of Proposed Building Envelopes. Since none of the future traffic noise impacts are greater than 60 CNEL, future exterior-to-interior calculations will not be required.

Table 5. Calculated Future Traffic Noise Impacts at Second Level Center of Proposed Building Envelopes

Receiver	Receiver Location	Traffic CNEL
R-18	Lot 1	27.4
R-19	Lot 2	27.0
R-20	Lot 3	28.1
R-21	Lot 4	29.6
R-22	Lot 5	29.8
R-23	Lot 6	31.6
R-24	Lot 7	31.8
R-25	Lot 8	34.6
R-26	Lot 9	35.9
R-27	Lot 10	37.6
R-28	Lot 12	40.8
R-29	Lot 13	39.1
R-30	Lot 14	34.8
R-31	Lot 15	31.6
R-32	Lot 16	31.0
R-33	Lot 17	30.2
R-34	Lot 18	29.4

6.0 CERTIFICATION

All recommendations for noise control are based on the best information available at the time our consulting services are provided. However, as there are many factors involved in sound and impact transmission, and Eilar Associates has no control over the construction, workmanship or materials, Eilar Associates is specifically not liable for final results of any recommendations or implementation of the recommendations.

The findings and recommendations of this acoustical analysis report are based on the information available and are a true and factual analysis of the potential acoustical issues associated with the Borrego Springs 50 project in the Community of Borrego Springs, County of San Diego, California. This report was prepared by Mark Sturino, Michael Burrill and Douglas K. Eilar.

EILARASSOCIATES

Mark Sturino, Acoustical Consultant

Douglas K Eilar, Principal

7.0 REFERENCES

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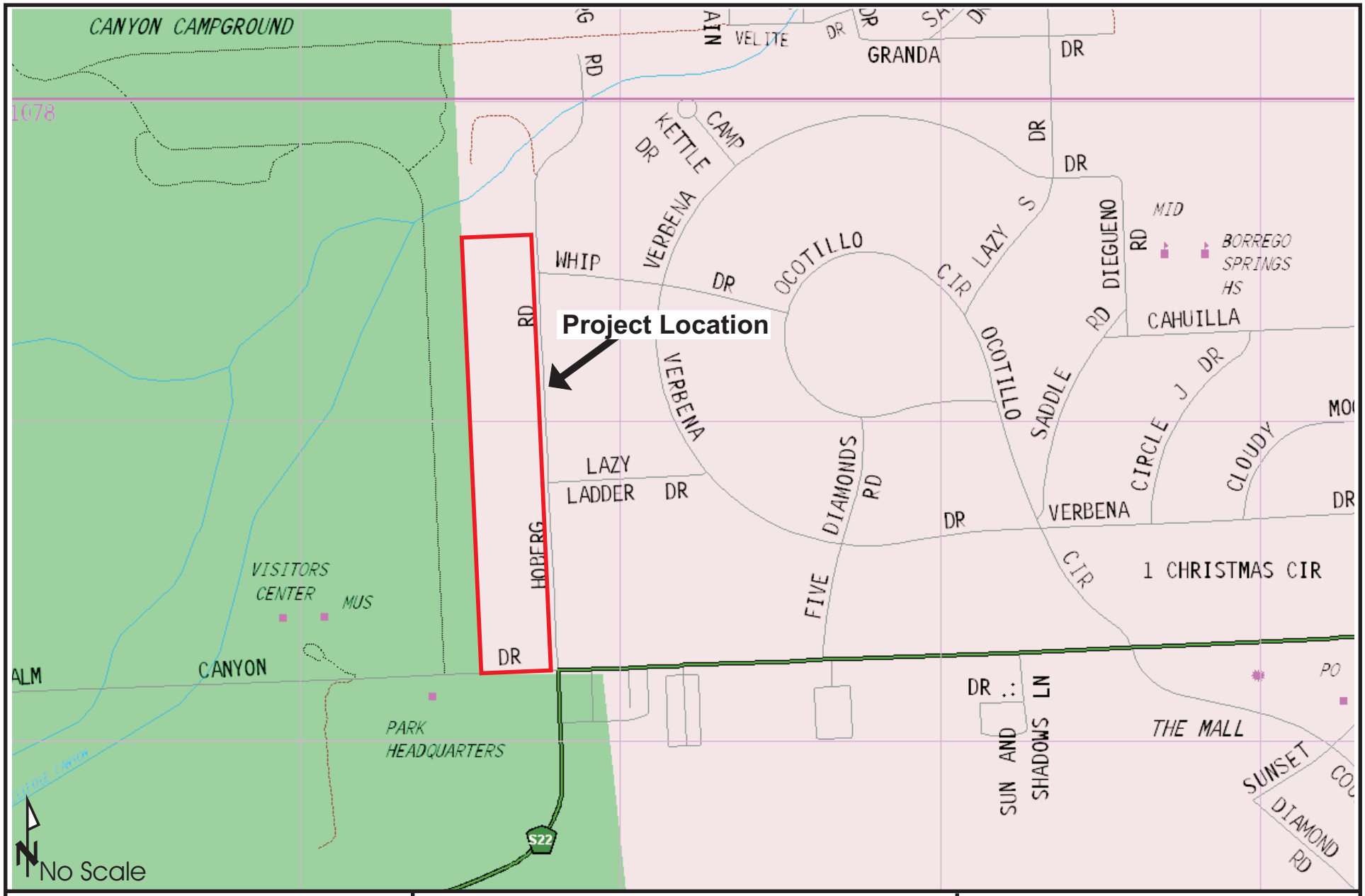
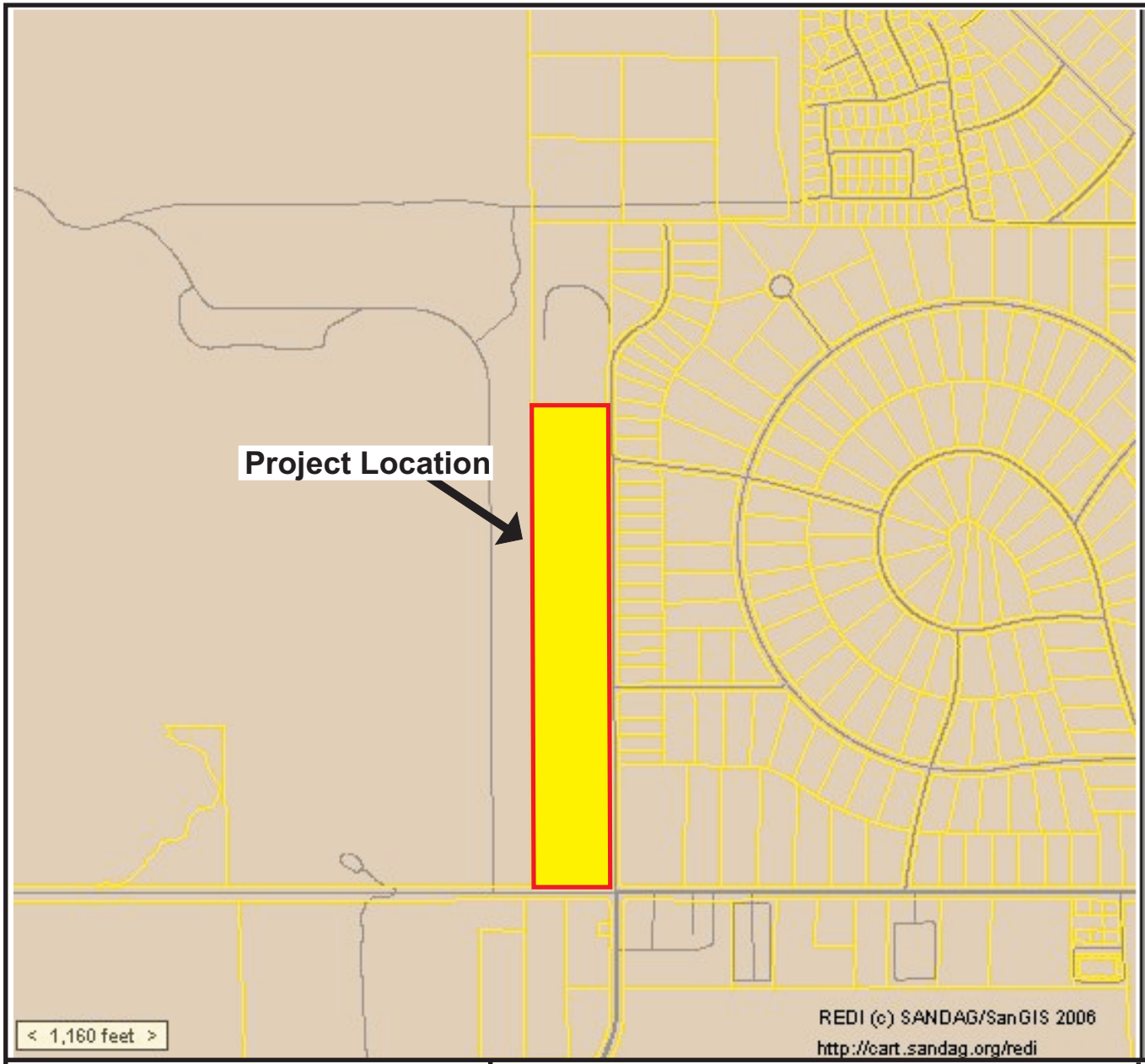
FIGURES



Eilar Associates **539 Encinitas Boulevard, Suite 206** **Encinitas, California 92024** **760-753-1865**	**Vicinity Map** **Job # A61222N1**	**Figure 1**



LEGEND

Reference Layers

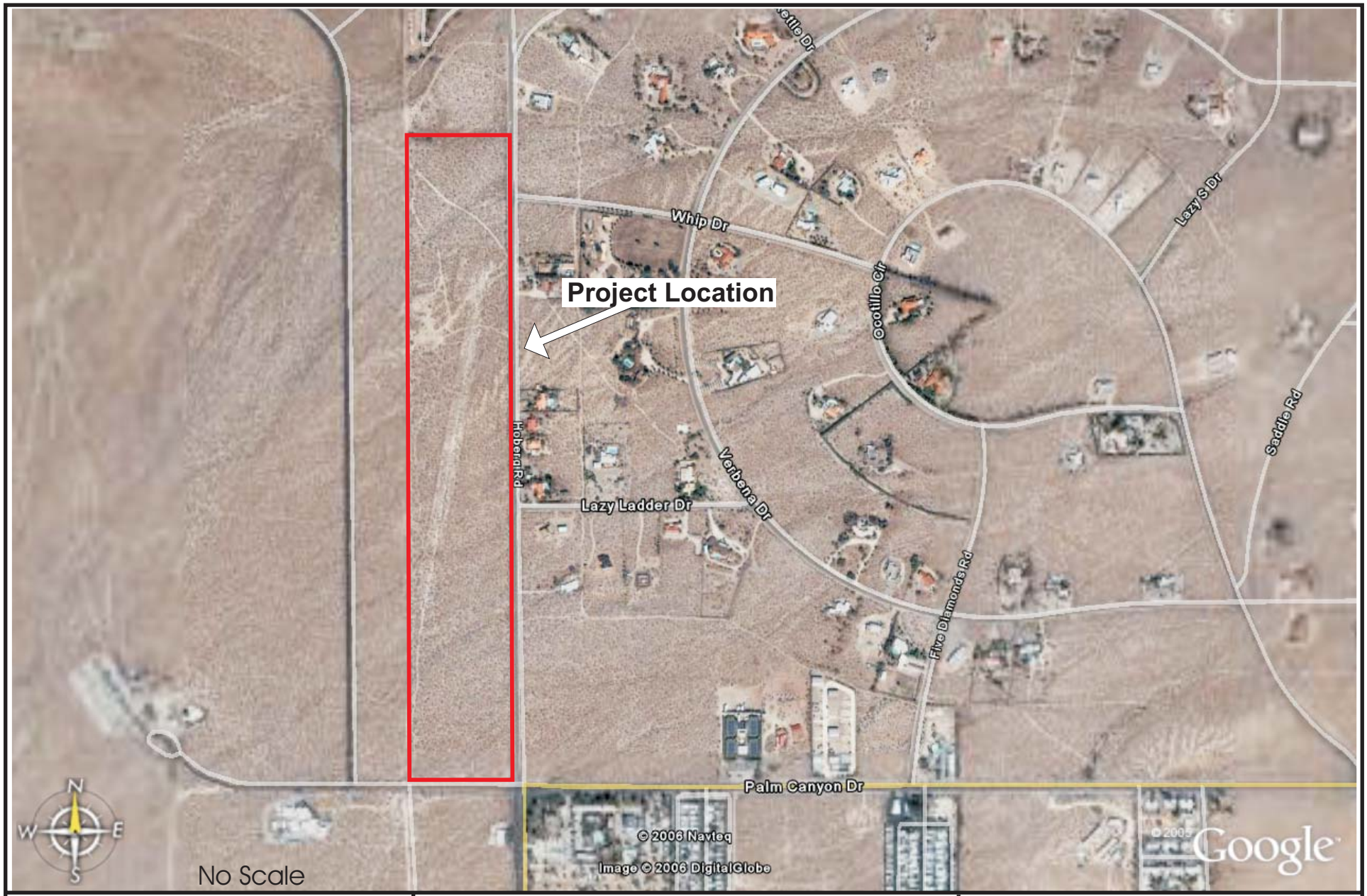
Parcels

Roads

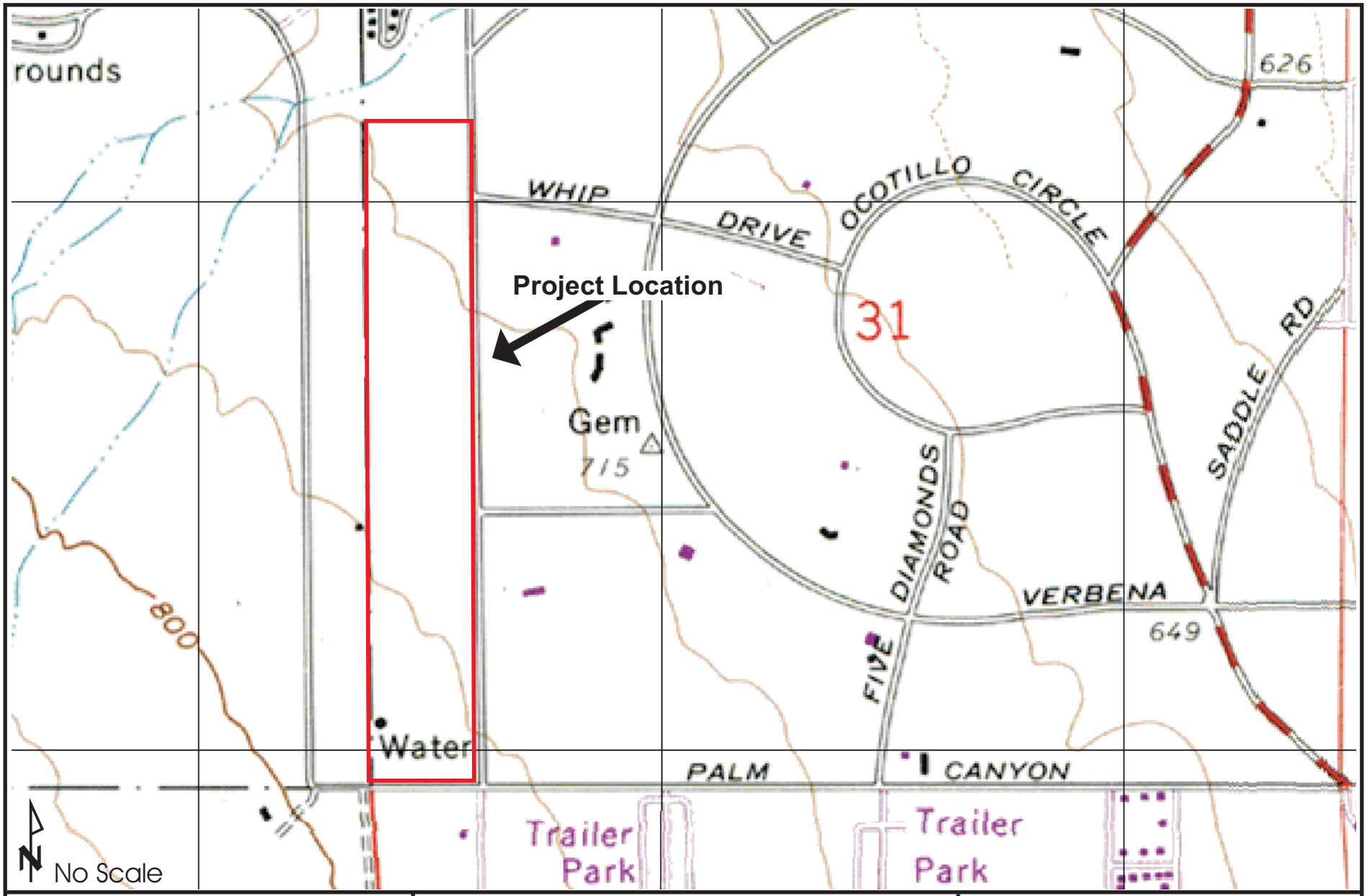
APN: 141-080-05-00

N

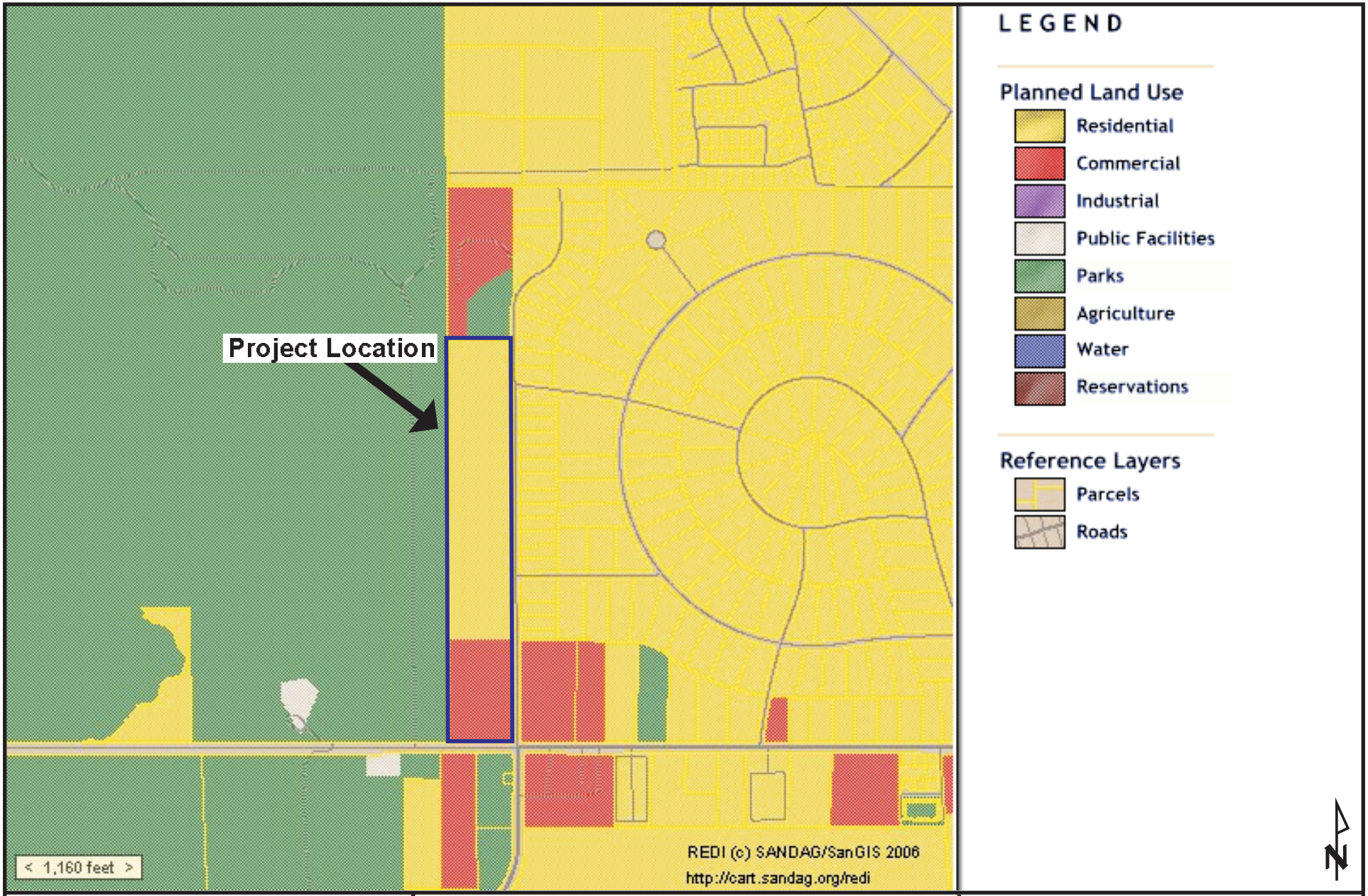
Eilar Associates **539 Encinitas Boulevard, Suite 206** **Encinitas, California 92024** **760-753-1865**	**Assessor's Parcel Map** **Job # A61222N1**	**Figure 2**



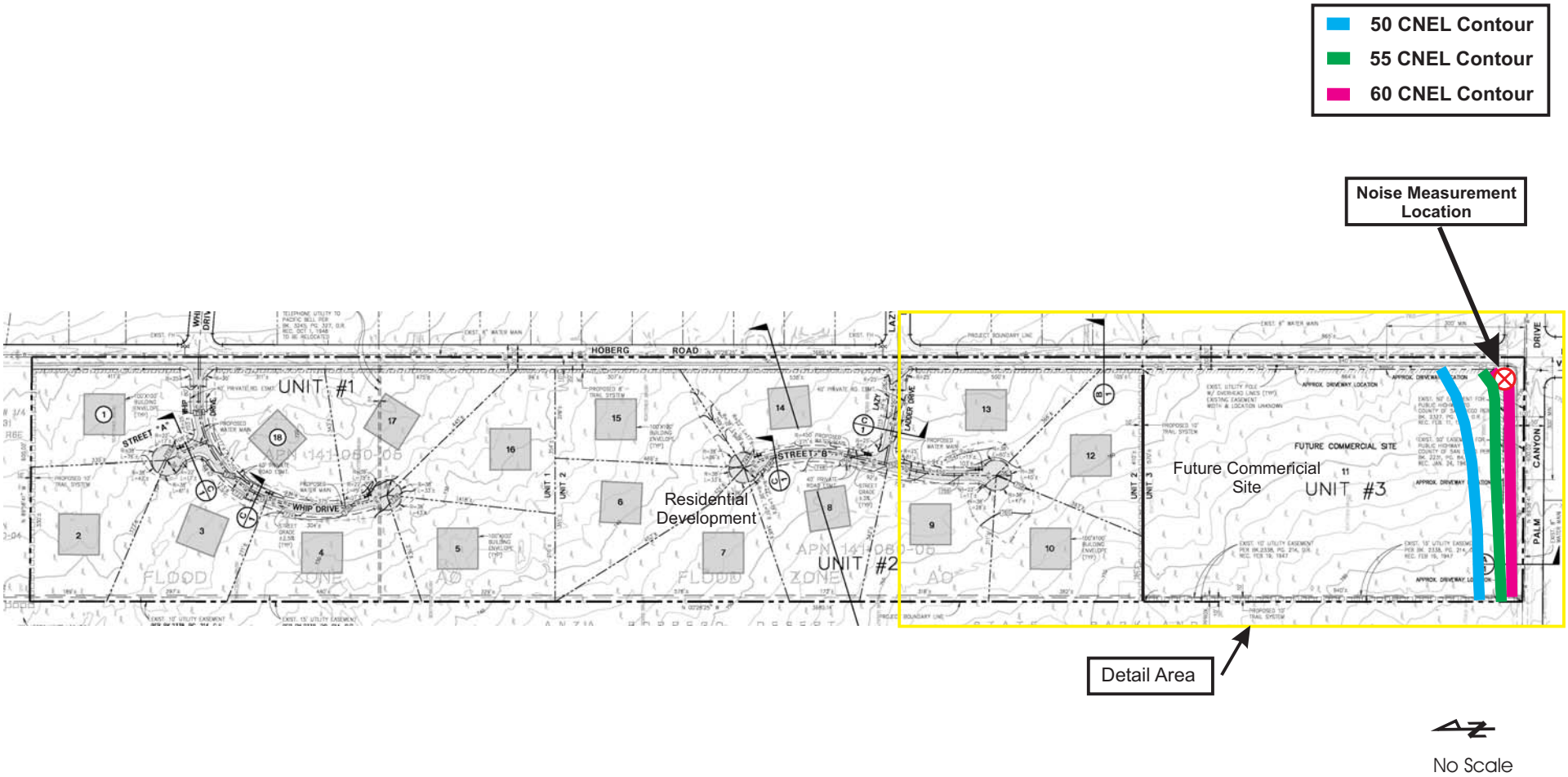
Eilar Associates **539 Encinitas Boulevard, Suite 206** **Encinitas, California 92024** **760-753-1865**	**Satellite Aerial Photograph** **Job # A61222N1**	**Figure 3**



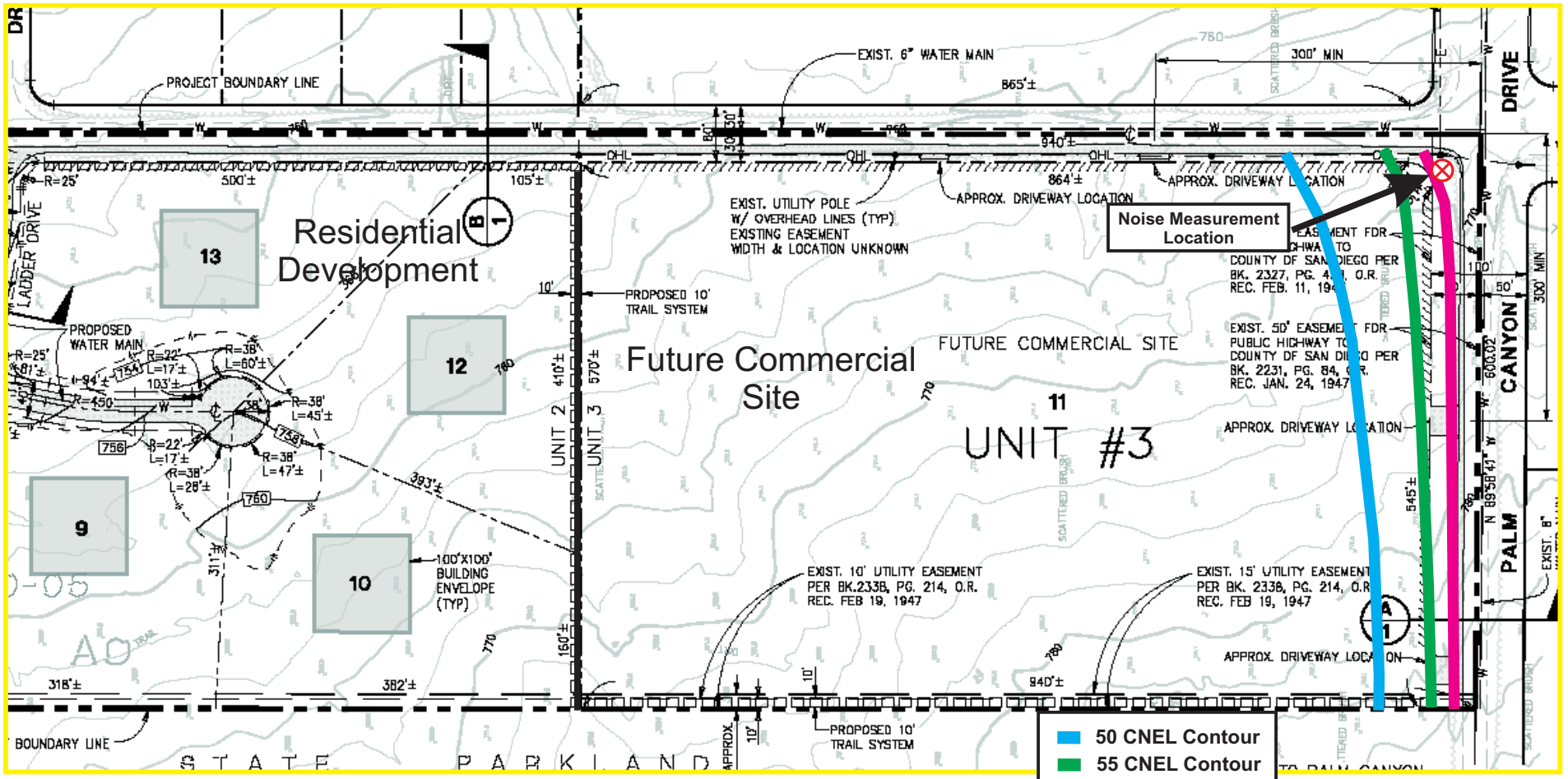
Eilar Associates **539 Encinitas Boulevard, Suite 206** **Encinitas, California 92024** **760-753-1865**	**Topographic Map** **Job # A61222N1**	**Figure 4**



Eilar Associates 539 Encinitas Boulevard, Suite 206 Encinitas, California 92024 760-753-1865	**Planned Land Use Map** **Job # A61222N1**	**Figure 5**

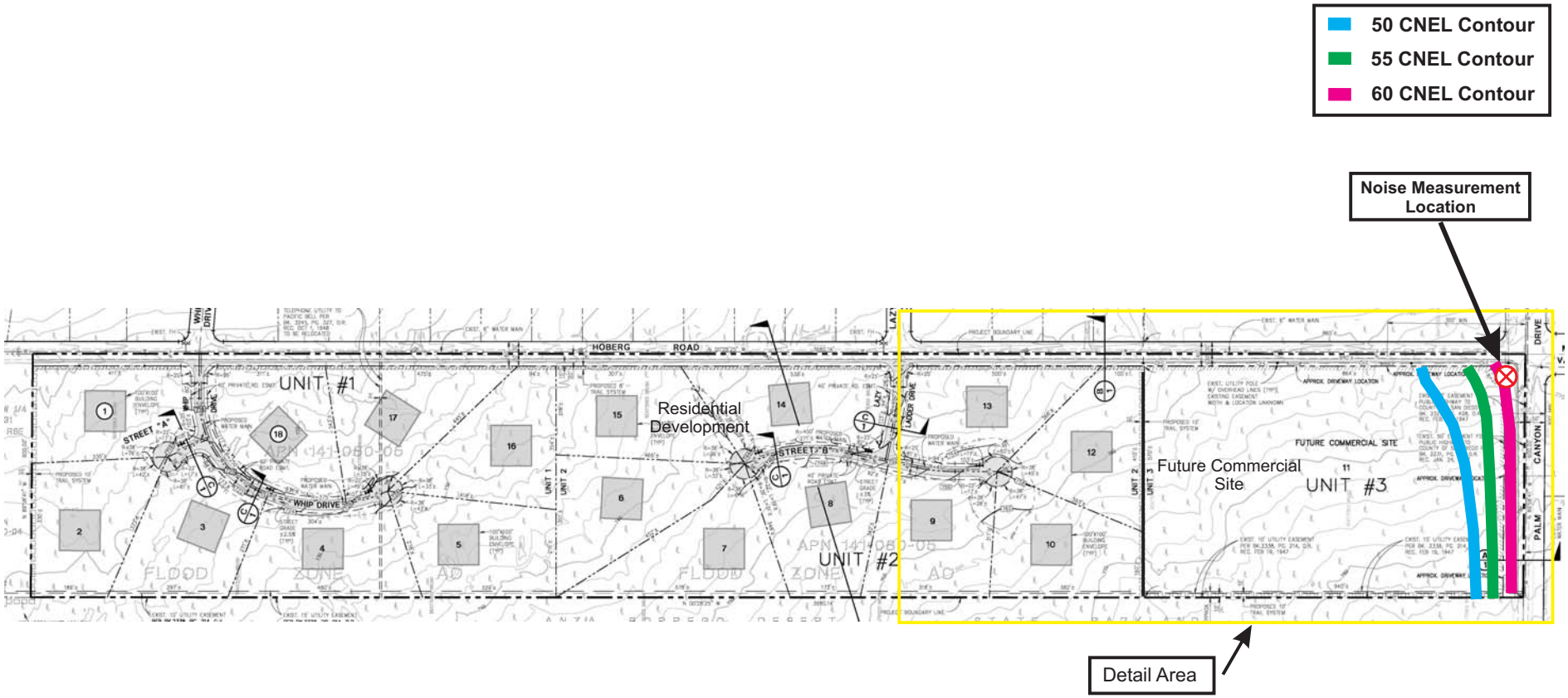


Eilar Associates, Inc. **539 Encinitas Boulevard, Suite 206** **Encinitas, California 92024** **760-753-1865**	**Preliminary Grading Plan Showing Current Traffic CNEL Contours and Noise Measurement Location** **Job # A61222N1**	**Figure 6A**

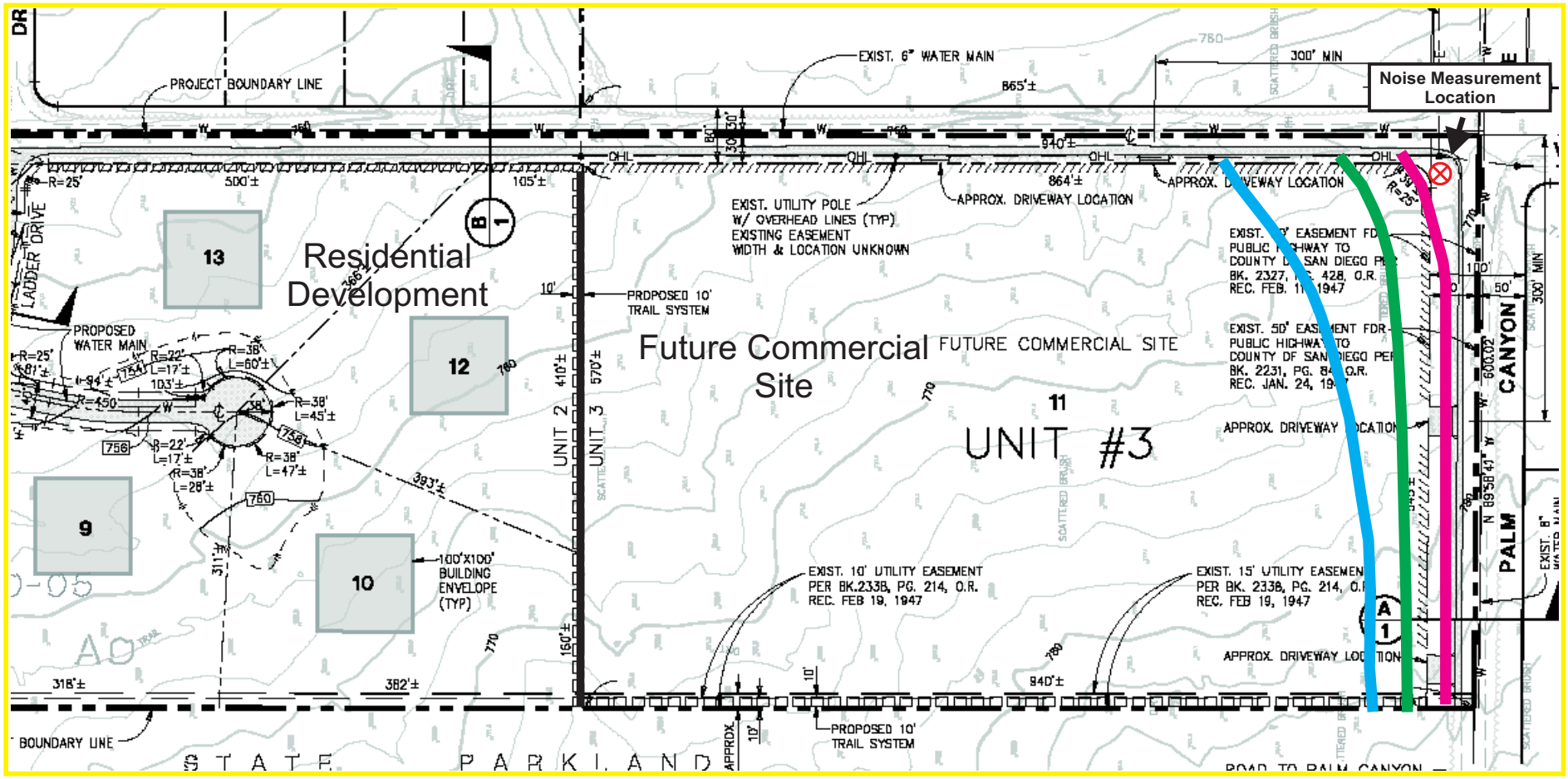


No Scale

Eilar Associates, Inc. **539 Encinitas Boulevard, Suite 206** **Encinitas, California 92024** **760-753-1865**	**Detail of Preliminary Grading Plan Showing Current Traffic CNEL Contours and Noise Measurement Location** **Job # A61222N1**	**Figure 6B**



Eilar Associates, Inc. **539 Encinitas Boulevard, Suite 206** **Encinitas, California 92024** **760-753-1865**	**Preliminary Grading Plan Showing Future Traffic CNEL Contours and Noise Measurement Location** **Job # A61222N1**	**Figure 7A**



No Scale

Eilar Associates, Inc. **539 Encinitas Boulevard, Suite 206** **Encinitas, California 92024** **760-753-1865**	**Detail of Preliminary Grading Plan Showing Future Traffic CNEL Contours and Noise Measurement Location** **Job # A61222N1**	**Figure 7B**

APPENDIX A

County of San Diego Scoping Letter, Dated September 21, 2006

GARY L. PRYOR
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017

SAN MARCOS OFFICE
151 E. CARMEL STREET
SAN MARCOS, CA 92078-4309
(760) 471-0730

EL CAJON OFFICE
200 EAST MAIN ST. - SIXTH FLOOR
EL CAJON, CA 92020-3912
(619) 441-4030

September 21, 2006

Ms Jo MacKenzie
1578 Palomar Drive
San Marcos, California 92069

CASE NUMBER: TM 5511; ER 06-05-003; PROJECT NAME: Borrego 50 Acres
PROJECT ADDRESS: Hoberg Road @ Palm Canyon Drive; APN 141-080-05

Dear Ms MacKenzie:

The Department of Planning and Land Use (DPLU) has reviewed your application for a Tentative Map and is providing you with the attached package of information as a guide for further processing your application. This package consists of:

- Determination of Completeness pursuant to Section 65943 of the Government Code;
- Determination of Completeness pursuant to the California Environmental Quality Act (CEQA);
- A MATRIX which summarizes all the information we are requesting;
- Attachments which are detailed and provide you with very specific information on our request(s);
- Preliminary conditions from the Department of Public Works;
- An Environmental Cost Estimate; and,
- Estimated Processing Schedule

MAJOR PROJECT ISSUE(S)

The following project issue(s) were identified during the project scoping and are further discussed in the attachments to this letter. These issue(s) may require substantial redesign of the proposed project or, if not resolved, would result in a recommendation for project denial by DPLU. These issue(s) discussed below, were identified based upon information presently available to the County and are subject to change upon submittal of further information and studies:

The project site is located within the Borrego Valley which is subject to unsustainable overdraft of groundwater resources such as the project proposes. The County groundwater geologist will prepare a groundwater investigation of the project, but preliminary estimates demonstrate that the project groundwater demand would exceed 20 acre-feet annually, which is considered a cumulatively considerable, significant impact under the CEQA. In accordance with DPLU policy (http://www.sdcounty.ca.gov/dplu/Resource/docs/3~pdf/Borrego_Groundwater.pdf), the project must include off-setting measures to reduce groundwater usage such that there would be no net gain in aquifer extraction. Such measures must provide documentary evidence of a legally enforceable mechanism to accomplish this objective. 858-694-38

PROJECT DESCRIPTION

The project is a Major Subdivision of 50.09 acres into 33 single-family residential lots of 1 acre each and 1 commercial lot of 11.6 acres. The subject property is respectively zoned RS1 Single Family Residential and C42 Recreational Commercial Use Regulations with a minimum lot size of 1 acre and 6,000 square feet and is designated (2) Residential and (26) Visitor-Serving Commercial by the Desert Subregional Plan.

DETERMINATION OF COMPLETENESS PURSUANT TO SECTION 65943 OF THE GOVERNMENT CODE

DPLU has reviewed your application and has determined that it is complete pursuant to Section 65943 of the Government Code.

DETERMINATION OF COMPLETENESS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The Department of Planning and Land Use has completed its review of your AEIS and determined it not to be "complete" as defined by the CEQA. At this time, additional information will be required to determine your project's potential impacts on the environment and to complete the CEQA Environmental Initial Study.

These reports will be reviewed for technical accuracy and to determine whether a Negative Declaration or Environmental Impact Report will be necessary for your project. Additional copies of the final technical report(s) will be required when your project's environmental documents are circulated for public review. The reasons for this determination and the information required are found in the attachments to this letter.

CONSULTANT LIST & MEMORANDUM OF UNDERSTANDING (MOU)

The County of San Diego's CEQA guidelines require that environmental technical studies be prepared by a California Licensed professional (i.e., engineer, geologist) or consultant from the County's CEQA Consultant List, which can be found on the County of San Diego's website at:
http://www.sdcdplu.org/dplu/Resource/docs/3~pdf/consList.pdf.

ATTACHMENT D
Noise

The project site is adjacent to Hoberg Road and adjacent future residences may be impacted by noise from this road based upon a build-out volume of 5,000 ADT (SANDAG 2030). Preliminary site review indicates that without site-specific noise mitigation measures, residences comprising the project site may be impacted by road noise levels that exceed the applicable sound limits of the Noise Element of the General Plan.

Policy 4b of the Noise Element of the General Plan specifies that "Whenever it appears that new development will result in any (existing or future) noise sensitive area being subjected to noise levels of CNEL equal to 60 decibels or greater, an acoustical study should be required". The Noise Element defines "noise sensitive area" as 10 percent of the lot area for single-family residential lots, and the contour areas exposed to the 60 dB sound level may encroach upon lots along Hoberg Road.

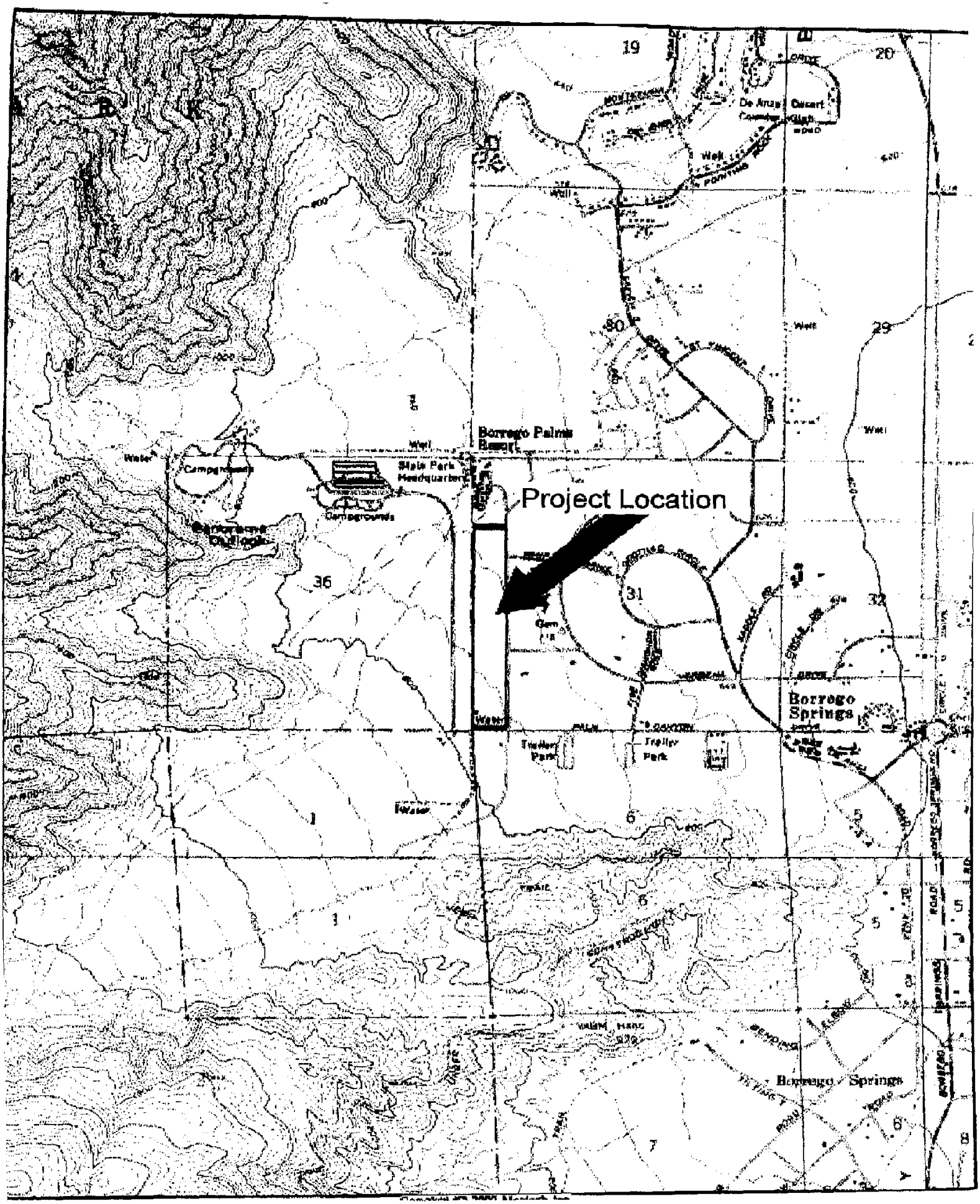
According to the Noise Element of the General Plan, if the acoustical study shows that noise level at any noise sensitive area will exceed CNEL equal to 60 decibels, the development should not be approved unless the following findings are made:

A. Modifications to the development have been made or will be made which reduce the exterior noise level below CNEL equal to 60 decibels; or

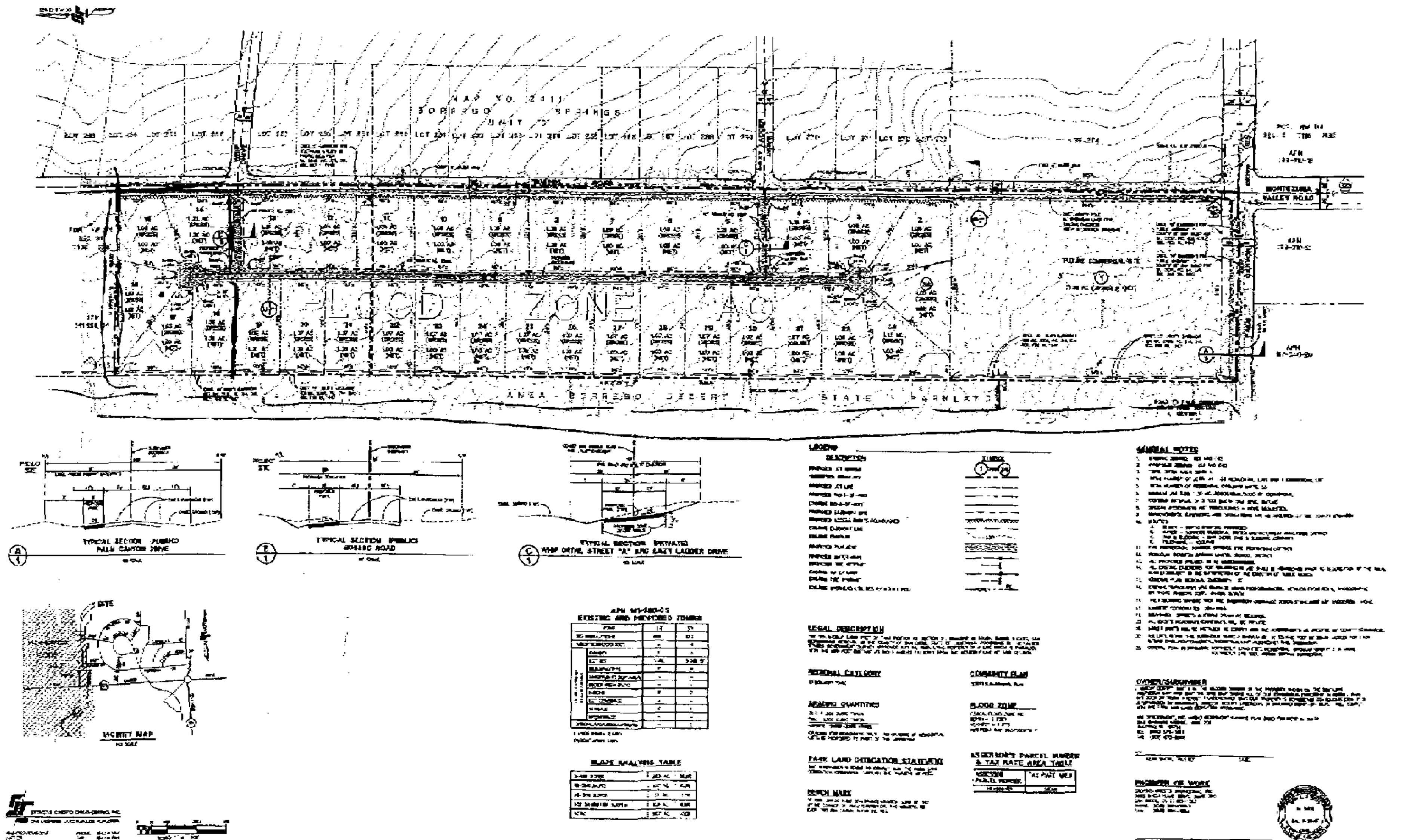
B. If with current noise abatement technology it is infeasible to reduce exterior CNEL to 60 decibels, then modifications to the development have been or will be made which reduce interior noise below CNEL equal to 45 decibels. Particular attention shall be given to noise sensitive interior spaces such as bedrooms. And,

C. If finding "B" above is made, a further finding is made that there are specifically identified overriding social or economic considerations which warrant approval of the development without modifications as described in "A" above.

The noise study should assess the existing and forecasted noise impacts to the proposed project and should identify applicable noise mitigation measures. The feasibility and effectiveness of the proposed noise mitigation measures should be substantiated by the results of the acoustical calculations and/or field tests. Visual/aesthetic compatibility of any proposed noise mitigation measures must be addressed. Additionally, no measure should by its design increase the potential for off-site flooding.


Project Location
Borrego Springs
Borrego Springs
Borrego Palms Desert
Campgrounds
State Park Headquarters
Trailer Park
Trailer Park
De Anza Desert Club
Water
Water
Well
Well
Well
19
20
29
30
31
32
36
1
6
5
7
8

TENTATIVE MAP
COUNTY OF SAN DIEGO TRACT ____________



APPENDIX B

Relevant Traffic Information

Rural Information and Customer Service

Servicio al cliente

- Rural bus customer service only: **1-800-858-0291**
  Unicente para autobus rural: **1-800-858-0291**

Regional Transit Information

Información

- Regional Transit Information: **(619) 233-3004**
  Otros medios de transporte: **(619) 233-3004**
- TTY/TTD: **(619) 234-5005**
  Teletipo para sordos: **(619) 234-5005**

While on board, remember:

Estando a bordo, recuerde:

www.sdcommute.com

891/892

Borrego Springs
Ramona

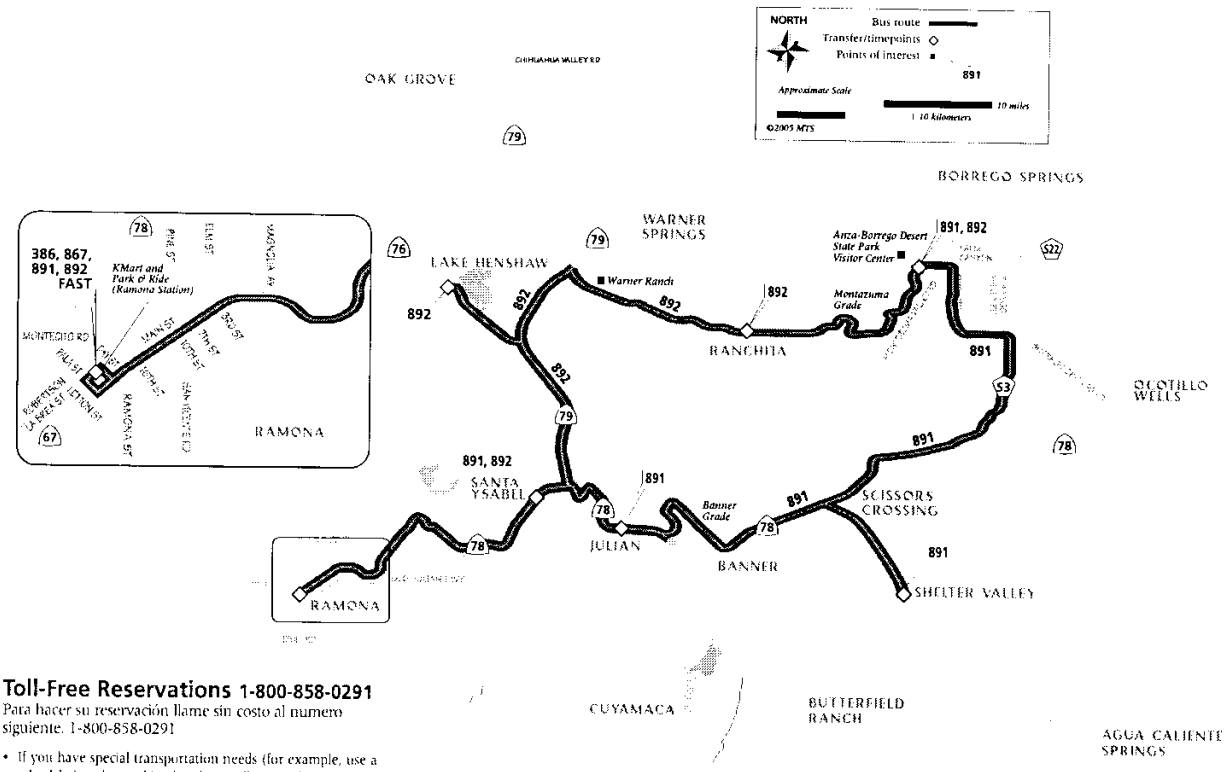
Banner
Julian
Lake Henshaw
Ranchita

Santa Ysabel
Scissors Crossings
Shelter Valley

September 6, 2005

MTS
Metropolitan Transit System

All buses equipped with bike racks



Toll-Free Reservations 1-800-858-0291

Para hacer su reservación llame sin costo al numero siguiente. 1-800-858-0291

- If you have special transportation needs (for example, use a wheelchair or have a bicycle) please call to coordinate your trip. Because of limited spaces, we recommend you call the day before if you will be traveling with either wheelchair or bicycle.

  Debido a lugar limitado, si su transporte requiere atención especial, por ejemplo si necesita bordar en silla de ruedas o si va a cargar su bicicleta, le recomendamos nos llame un día antes de la fecha que va a necesitar nuestro servicio para que podamos coordinar su transporte, y así poderle servir mejor.
- We may be able to go off-route for your pick up or drop off location. Please call in advance (at least one day) to discuss your travel plans and dates.

  Si nos llama un día antes del día que piensa usar nuestro servicio y nos da a saber sus planes, incluyendo la hora, podríamos salirnos de nuestra ruta para proveerle un viaje completo de ida y vuelta.
- To many people, the most important feature of a reservation is that it assures you will get your trip. Please call at least one day in advance. We will wait up to ten minutes after the scheduled departure time for a person with a reservation.

  Para mucha gente, el beneficio más importante de hacer una reservación por lo menos con un día de anticipo, es que le asegura que tendrá el transporte cuando lo necesita. Además, para personas con reservación, podemos esperar hasta 10 minutos despues de su hora de partida para que borde el camión.
- If you have a reservation and are unable to travel, please call as soon as you can to cancel. Other passengers will appreciate it.

  Si hace una reservación, y no va a usar el transporte, por favor llaméenos lo mas pronto posible y cánsele s reservación. Otras personas que necesitan el transporte se lo van agradecer.
- Please do not call for a reservation less than two hours before your requested pick up.

  Por favor no llame para hacer su reservación con menos de dos horas con antiopo de la hora que va a necesitar nuestro servicio.

The Transit Store is your one-stop store for the region's public transportation.

THE TRANSIT STORE

102 Broadway (at First Avenue), San Diego
102 Broadway (esquina de avenida 1ª), San Diego
Monday through Friday 9:00 a.m. to 5:00 p.m.
lunes a viernes 9:00 a.m. a 5:00 p.m.
Saturday–Sunday closed
sábado a domingo cerrado

Lost & Found

Objetos extraviados y sugerencias

- Articles found on the bus are turned in at Laidlaw Transit Services Ramona, call: **(800) 858-0291.**
- Los objectos olvidados en los autobuses se depositan en Laidlaw Transit Services Ramona, lle al: **(800) 858-0291.**

Bicycles Welcome

All Rural buses are bicycle rack equipped.

Due to limited space, it is recommended you call dispatch 24 hours in advance to ensure a place for your bicycle on the bus.

Accessible Service

All Rural buses are wheelchair ramp or lift equipped.

ALTERNATIVE FORMATS ARE AVAILABLE UPON REQUEST

From Borrego Springs to Ramona

Route and Day of Service	Borrego Springs DEPART	Ranchita	Shelter Valley	Banner	Julian ARRIVE	Julian DEPART	Lake Henshaw	Santa Ysabel	Ramona ARRIVE
892 Thursday	7:20a	7:50a	-	-	-	-	8:10a	8:35a	9:00a
	9:20	9:50	-	-	-	-	10:10	10:35	11:00
	12:10p	12:40p	-	-	-	-	1:00p	1:25p	1:50p
	2:00	2:50	-	-	-	-	2:50	3:15	3:40
891 Saturday	6:45a	-	7:15a	7:25a	7:40a	7:45a	-	8:05a	8:30a
	9:45	-	10:15	10:25	10:40	10:45	-	11:05	11:30
	12:05p	-	12:35p	12:45p	1:00p	1:05p	-	1:25p	1:50p
	2:45	-	3:15	3:25	3:40	3:45	-	4:05	4:30

From Ramona to Borrego Springs

Route and Day of Service	Ramona DEPART	Santa Ysabel	Lake Henshaw	Julian ARRIVE	Julian DEPART	Banner	Shelter Valley	Ranchita	Borrego Springs ARRIVE
892 Thursday	10:00a	10:30a	10:50a	-	-	-	-	11:20a	11:40
	12:00p	12:30p	12:50p	-	-	-	-	1:20p	1:40
	2:50	3:20	3:40	-	-	-	-	4:10	4:30
	3:55	4:25	4:45	-	-	-	-	5:15	5:35
891 Saturday	9:30a	10:00a	-	10:10a	10:15a	10:25a	10:35a	-	11:05
	12:30p	1:00p	-	1:10p	1:15p	1:25p	1:35p	-	2:05
	2:50	3:20	-	3:30	3:35	3:45	3:55	-	4:25
	5:00	5:30	-	5:40	5:45	5:55	6:05	-	6:35

All buses provide wheelchair lift service. All buses are bicycle rack equipped.

This route does not operate on Sundays, Mondays, Tuesdays, Wednesdays. Fridays and the observation of the following holidays: New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas Day

Fares - Exact fare, please

Pasajes—Favor de pagar la cantidad exacta, con billete o monedas.

The driver cannot make or give change.
El conductor no puede hacer ni puede dar el cambio.

One-way Trip, Rural Community to El Cajon/ La Mesa, Ramona **$2.00**

Banner, Julian, Ranchita, Santa Ysabel, Scissors Crossing, Shelter Valley **$3.00**

Trips under 25 miles in the back country
Los viajes bajo 25 millas en el país de espalda ... **$2.00**

Children 5 years and under ..... **Free**
Niños de cinco años y menores ..... **Gratis**

Regional Monthly Passes Upgrade per trip
Los Pasos Listos regionales Mejoran **$1.00**

Regional Transfer Credit (A maximum of $1.00 can be credited toward a rural bus fare) **$1.00**

El Crédito regional de la Transferencia (Un máximo de $1.00 puede ser acreditado hacia un precio del billete rural de autobús)

Prepaid Fares with upgrade per trip

Fichas y Pases

$2.25 Tokens (20 tokens discounted). Tokens are valid towards the rural fare **$41.80**
Fichas de $2.25 (20 fichas con un descuento). Las fichas son válidas para viajar en los autobuses y el trolley.

Monthly Pass **$60.00**
Pase mensual

Monthly Pass for Senior (60+ years)/ Disabled persons* **$15.00**
Pase mensual para mayores (60 años o más) e incapacitados*

Monthly Pass for Youths* (18 and under) **$30.00**
Pase mensual para jovenes* (18 años o menores)*

Half-month passes are also available beginning the 15th of each month at The Transit Store and "Pass-by-Mail" (call (619) 233-3004 to request envelopes).

A partir del 15 de cada mes, el Transit Store dispondrá de pases de medio mes y contaremos también con un servicio de "Pass-by-Mail" (Pases por Correo). Para solicitar los sobres, sírvase llamar al (619) 233-3004.

* Discounted passes made possible by TransNet, your local transportation sales tax.

* Los pases con descuento son producto de TransNet, el impuesto mercantil para mejoras viales.

Monthly Pass Outlets

Ralphs Grocery Stores -
All stores in San Diego County.

El Cajon
Check Cashing Place - 354 N. 2nd St.
Grossmont College - Student Affairs Window
Mailo's - El Cajon Transit Center

By mail
Order envelopes available by calling (619) 231-1466.

Regional Transfer Policy

Reglamento Regional Sobre Transbordos

- A transfer slip is issued only when fare is paid. The transfer slip is good until the time and date shown on the slip (approximately 90 minutes from the end of the terminal). Return trips may be made during this time. Transfer slips may be used to transfer to any regular MTS bus, NCTD bus, Trolley, DART, ADA Complementary Paratransit service, and Coaster trains. Upgrades may be required.
- When transferring to a route with a higher fare than originally paid, an upgrade fare for the difference is required.
- Los boletos de transbordo se entregan únicente cuando se paga la tarifa. Este boleto es válido si se utiliza durante las horas y la fecha indicadas en dicho boleto (aproximadente 90 minutos desde donde termina su viaje). Los viajes de regreso pueden hacerse durante este tiempo. Los boletos de transbordo se pueden utilizar para transbordar a cualquier autobús normal del MTS (Sistema Metropolitano de Transporte), NCTD bus, Trolley, servicios de la ADA Complementary Paratransit (Transporte complementario según la Ley para incapacitados de américa) y los trenes del Coaster. Puede que en algunos casos se tenga que pagar una diferencia.
- Cuando va a efectuar un transbordo a una ruta en la que la tarifa es mayor que la que usted pagó, tendrá que pagar una diferencia. Las personas mayores (seniors) y las personas incapacitadas que muestren su pase no pagan la diferencia al hacer un transbordo (en la ruta establecida).

Bike Racks

Bicycles are welcome on Rural Routes at no additional charge. Let the bus driver know before you load or unload your bike! When using the bike rack place both wheels upright in the rack and secure your bike in place with the retaining bar. Bikes may be loaded/unloaded at any stop where it is feasible and safe.

Laidlaw Transit and MTS are not responsible for loss or damage to bicycles carried on Rural Route racks.

For more information about lockers/rack, maps, safety tips, call **(619) 231-BIKE.**

La Ruta acepta bicicletas sin cargo adicional. ¡Informe al conductor del autobús para que esté al corriente antes de cargar o descargar su bicicleta! Cuando use un estante para bicicletas, coloque bas ruedas hacia arriba en el estante y mantenga fija su bicicleta con la barra de retención. Las bicicletas pueden cargarse y descargarse en cualquier parada, siempre que sea seguro y factible.

Laidlaw Transit Services y MTS no se hacen responsables de las pérdidas o daños a las bicicletas que se transporten en los estantes de los autobuses de la Ruta.

Para obtener consejos sobre seguridad, mapas, taquillas/estantes, llame al **(619) 231-BIKE.**

Please Note

Tome nota

- Priority seating are seats that are provided for the convenience of persons with special needs. Please make these seats available for the Seniors and Disabled persons.

  Los asientos de proriedad son facilitados para la conveniencia de personas con necesidades especiales. Porfavor haga disponsibles estos asientos para la gente mayor y los incapacitados.

- Fareboxes accept $1 bills and Susan B. Anthony dollars, but do not give change.

  Las cajas recolectoras aceptan billetes de un dolar y monedas Susan B. Anthony de a dolar, pero no devuelven cambio.

- MTS Universal $2.25 tokens are accepted on Rural Routes (upgrade may apply).

  MTS fichas universales de $2.25 son aceptadas en la ruta toward the rural fare.

- The schedules and other arrangements shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables, nor for any inconvenience caused by delayed buses.

  Los horarios y otras disposiciones que se indican en este itinerario están sujetos a cbios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

KEY TO THE MASTER TRAFFIC CENSUS LISTING

LOCATION OF COUNTER: This column tells you in which road segment a count was taken giving you the name of the street the count was taken on and also the direction from which cross street the counter was located.

LOCATION CODE: This gives you the 5 digit code for both intersections involved in this segment.

TYPE: The type of count station involved;
1. MASTER - Counted quarterly.
2. PRIMARY - Counted once per year.
3. SECONDARY - Counted once per two years.
4. SPECIAL - Counts done by request.
5. HPMS - Highway Performance Monitoring System.

DATE: MM/DD/YY - Month/Day/Year for this count (beginning day for more than one day counts)

DAY: Day of the week the count was taken on.
(Beginning day for more than one day counts)
MO Monday, TU Tuesday, WE Wednesday, TH Thursday, FR Friday, SA Saturday, SU Sunday.

WEATHER: The weather on the beginning day of the count.

PRD: Count Period;
1. 24 HOUR COUNT - usually a week day.
5. WEEKEND PLUS - weekend and one or more weekdays.
7. 7 DAY COUNT - a full 7 day count.

ADT: Average Daily Traffic, calculated only on full seven day counts.

24 HR VOL: Volume for one day or the average of a one to six day count.

VEH DIR:
N - northbound traffic only
S - southbound traffic only
W - westbound traffic only
E - eastbound traffic only
X - both directions combined

AM PEAK BEGINNING AT: TIME COUNT DAY This gives you the highest peak of volume for a one hour period during the AM hours and the hour and the day on which this occurred.

PM PEAK BEGINNING AT: TIME COUNT DAY This gives you the highest peak of volume for a one hour period during the AM hours and the hour and the day on which this occurred.

CHANGE PERCENT: This is only calculated on previous counts that have the same period and direction of traffic as this count.

NATURE SAVER™ FAX MEMO 01616	Date 1/11/07	# of pages ▶ 3
To MARK STURNO	From NICK ORTIZ	
Co./Dept EIAR	Co. County DPW	
Phone # 760-753-1865	Phone # 858-874-4204	
Fax # 760-753-2597	Fax # 858-874-4028	

ROAD NAME	LOCATION OF COUNTER	COUNTER LOCATION	HPS PG-CRD	TYPE	BEGIN DATE	BGN DAY	WEA	PRD	ADT	24 HR VOL	VEH DIR	AM PEAK BEGIN AT TIME	AM PEAK BEGIN AT COUNT	AM PEAK BEGIN AT DAY	PM PEAK BEGIN AT TIME	PM PEAK BEGIN AT COUNT	PM PEAK BEGIN AT DAY
PALM CANYON DR	E BORREGO VALLEY RD	26878-00056-E	4 -E06	4	06/18/97	WE	CLR	1		635	X	7:30	63	WE	12:00	54	WE
				4	03/12/99	FR	CLR	1		1394	X	10:45	156	FR	13:15	113	FR
				4	03/14/99	SU	CLR	1		1561	X	10:00	172	SU	12:00	178	SU
				4	01/08/02	TU	CLR	7	470		W	11:00	55	SA	14:00	78	SA
				4	01/08/02	TU	CLR	7	460		E	11:00	63	SA	15:00	65	SA
				4	01/11/02	FR	CLR	1		484	W	11:00	51	FR	14:00	59	FR
				4	01/11/02	FR	CLR	1		497	E	11:00	40	FR	16:00	46	FR
				4	01/12/02	SA	CLR	1		607	W	11:00	55	SA	14:00	78	SA
				4	01/12/02	SA	CLR	1		631	E	11:00	63	SA	15:00	65	SA
PALM CANYON DR	W BORREGO VALLEY RD	00056-00472-W	4F3-E11	2	03/30/78	TH	CLY	5		2796	X	11:15	350	SU	13:45	440	SU
				2	04/10/80	TH	CLR	5		2216	X	11:45	240	SU	12:15	260	SU
				2	04/02/81	TH	CLY	5		1916	X	11:15	220	SU	15:30	200	SA
				2	04/15/82	TH	CLR	1		2043	X	11:15	330	SA	13:45	360	SU
				2	04/21/83	TH	CLY	5		1960	X	10:30	190	SU	13:30	220	SU
				2	04/12/84	TH	CLR	1		1911	X	10:00	190	TH	14:00	170	TH
				2	04/11/85	TH	CLR	5		1830	X	9:30	180	SA	12:15	190	SA
				2	04/16/87	TH	CLR	5		2206	X	11:30	240	SA	14:15	210	SA
				2	04/14/88	TH	CLY	5		1613	X	11:15	160	SA	12:00	170	SA
				2	04/20/89	TH	CLR	1		1590	X	5:15	600	FR	14:30	120	TH
				2	04/06/90	FR	CLR	1		2284	X	8:00	185	FR	12:45	209	FR
				2	04/18/91	TH	CLR	1		3897	X	7:30	308	FR	14:00	453	TH
				2	04/09/92	TH	CLR	1		3558	X	11:00	357	FR	13:30	327	FR
				2	04/15/93	TH	CLR	1		2417	X	7:30	205	FR	14:00	265	FR
				4	03/28/02	TH	CLR	1		1385	W	8:45	122	TH	14:15	147	TH
				4	03/28/02	TH	CLR	1		1689	E	7:45	149	TH	14:00	150	TH
PALM CANYON DR	E STIRRUP RD/STIRRUP RD	00472-00473-E	4F3-A11	4	01/18/94	TU	CLR	1		3418	X	8:45	291	WE	14:15	351	TU
				4	01/09/03	TH	CLR	1		1701	W	9:00	134	TH	15:00	175	TH
PALM CANYON DR	W STIRRUP RD/STIRRUP RD	00473-00228-W	7C6 R09	4	01/09/03	TH	CLR	1		1819	E	9:00	137	TH	14:00	170	TH
PALM CANYON DR	E CHRISTMAS CIRCLE DR	00228-00105-E	4F2-Q12	4	02/14/79	WE	CLY	1		1470	W	11:30	190	WE	12:00	160	WE
PALM CANYON DR	W CHRISTMAS CIRCLE DR	00905-00447-W	4F2-Q11	4	02/14/79	WE	CLY	1		1630	E	11:30	210	WE	14:15	180	WE
				4	01/15/98	TH	CLR	1		4099	X	11:00	378	TH	14:30	415	TH

ROAD NAME		LOCATION OF COUNTER	COUNTER LOCATION	HPS FG-CRD	TYPE	BEGIN DATE	BGN DAY	WEA	PRD	ADT	24 HR VOL	VEH DIR	AM PEAK BEGIN AT TIME	AM PEAK COUNT	AM PEAK DAY	PM PEAK BEGIN AT TIME	PM PEAK COUNT	PM PEAK DAY
PALM CANYON DR	E	OCOTILLO CR/COUNTRY CL	00905-00447-E	4F2-Q11	4	01/09/03	TH	CLR	1		1428	W	11:00	130	TH	15:00	148	TH
					4	01/09/03	TH	CLR	1		1829	E	10:00	159	TH	12:00	181	TH
PALM CANYON DR	W	OCOTILLO CR/COUNTRY CL	00447-26877-W	4F2-N10	4	01/15/98	TH	CLR	1		2429	X	11:00	232	TH	14:30	249	TH
PALM CANYON DR	E	FIVE DIAMONDS RD	26877-28272-E	4F2-M11	2	03/30/78	TH	CLY	5		3800	X	11:45	800	SU	13:15	870	SU
					2	03/29/79	TH	CLY	5		2793	X	11:45	530	SU	12:15	590	SU
					2	04/10/80	TH	CLR	5		3220	X	11:30	430	SU	12:00	430	SU
					2	04/02/81	TH	CLY	5		2833	X	11:30	350	SA	12:30	390	SU
					2	04/15/82	TH	CLR	5		4853	X	11:45	870	SU	13:00	900	SU
					2	04/21/83	TH	CLY	5		3080	X	11:30	390	SU	13:15	400	SU
					2	04/12/84	TH	CLR	5		2873	X	11:45	300	SU	12:00	300	SU
					2	04/11/85	TH	CLR	5		2923	X	11:00	330	SA	13:30	330	SA
					2	04/03/86	TH	CLR	5		4006	X	11:30	490	SU	12:00	490	SU
					2	04/16/87	TH	CLR	5		2896	X	11:30	340	SA	17:00	0	SU
					2	04/14/88	TH	CLY	5		2883	X	11:15	280	SU	14:45	320	SA
					2	04/20/89	TH	CLR	1		2090	X	11:00	156	TH	14:00	150	TH
					2	04/06/90	FR	CLR	1		2812	X	10:45	198	FR	15:00	240	FR
					2	04/18/91	TH	CLR	1		2476	X	8:15	204	FR	13:00	392	TH
					2	04/09/92	TH	CLR	1		3998	X	11:00	335	FR	12:00	394	FR
					2	04/15/93	TH	CLR	1		3706	X	11:00	280	FR	12:15	336	FR
					4	03/28/02	TH	CLR	1		373	E	7:45	27	TH	18:15	55	TH
					4	03/28/02	TH	CLR	1		1800	W	9:45	136	TH	14:15	184	TH
PALM CANYON DR	E	MONTEZUMA VALLEY RD/HO	28272-00670-E	4F2-L11	4	03/12/99	FR	CLR	1		2621	X	11:00	229	FR	15:00	283	FR
					4	03/13/99	SA	CLR	1		3229	X	11:00	355	SU	13:00	386	SA

APPENDIX C

Relevant Analysis and Test Results

TNM Traffic Data and Results

Borrego Springs 50

On-Site Noise Measurement Conditions and Results	
Date	Tuesday, January 9, 2007
Time	12:15 p.m. to 12:45 p.m.
Conditions	Clear Skies, winds from the south @ 2-3 mph, temperature in the mid 80's with low humidity
Measured Noise Level	59.3 dBA L_{EQ}

On-Site Noise Measurement Traffic Count During						
Roadways		**Duration**	**Autos**	**Medium Trucks**	**Heavy Trucks**	**Total**
Palm Canyon Drive (Eastbound) [West of Hoberg Road]	Measured	15 minutes	11	0	1	12
	Overall	60 minutes	44	0	4	48
Palm Canyon Drive (Eastbound) [East of Hoberg Road]	Measured	15 minutes	6	0	0	6
	Overall	60 minutes	24	0	0	24
Palm Canyon Drive (Westbound) [West of Hoberg Road]	Measured	15 minutes	9	1	0	10
	Overall	60 minutes	36	4	0	40
Palm Canyon Drive (Westbound) [East of Hoberg Road]	Measured	15 minutes	6	2	1	9
	Overall	60 minutes	24	8	4	36
Montezuma Valley Road (Northbound)	Measured	15 minutes	7	0	1	8
	Overall	60 minutes	28	0	4	32
Montezuma Valley Road (Southbound)	Measured	15 minutes	6	1	1	8
	Overall	60 minutes	24	4	4	32

Calculated versus Measured Traffic Noise Data				
Calibration Receiver Position	**Calculated**	**Measured**	**Difference**	**Correction**
Southeast Corner of Project Site	59.9 dBA L_{EQ}	59.3 dBA L_{EQ}	0.6 dB	None

Current Traffic Reference Information

- Current traffic ADT for Montezuma Valley Road and the section of Palm Canyon Drive east of Hoberg Road were obtained from the San Diego Association of Governments (SanDAG) 2030 Traffic Volume Forecast, Series 10, as listed in the Transportation Forecast Information Center on SanDAG website at www.sandag.com.

- Current traffic ADT for the section of Palm Canyon Drive west of Hoberg Road was obtained using its classification as a Non-Circulation Element Residential Road and accompanying level of service tables from the County of San Diego Circulation Element.

- Further traffic information regarding Palm Canyon Drive machine counts was provided by Nick Ortiz, County of San Diego traffic engineer.

- Current truck percentages for all roadways were obtained based on neighboring and surrounding land use, roadway classification, and our professional experience during on-site observations.

Future Traffic Reference Information

- Future traffic ADT for Montezuma Valley Road was obtained from the San Diego Association of Governments (SanDAG) 2030 Traffic Volume Forecast, Series 10, as listed in the Transportation Forecast Information Center on SanDAG website at www.sandag.com.

- Future (year 2030) traffic ADT for the section of Palm Canyon Drive east of Hoberg Road was obtained from the "Board of Supervisors Hearing - August 2, 2006: Proposed Changes to Circulation Element Road Network and Framework" located on C-287, CE Road Segment 1 and 2A www.sdcounty.ca.gov/cnty/cntydepts/landuse/planning/GP2020/pubs/pc_jul06/c_borrego.pdf

- Future traffic ADT for the section of Palm Canyon Drive west of Hoberg Road was obtained using its classification as a Non-Circulation Element Residential Road and accompanying level of service tables from the County of San Diego Circulation Element

- The same truck percentages for current traffic were used for future truck traffic percentages on all roadways.

Current Overall Traffic Information					
Roadway Name	**Speed Limit (mph)**	**Truck Percentage (%) and AWT**			
		Total % AWT	**Auto**	**Medium Truck**	**Heavy Truck**
Montezuma Valley Road (Northbound)	45	100%	97%	2.5%	0.5%
		2000	113	3	1
Palm Canyon Drive (East of Hoberg Road)	45	100%	97%	2.5%	0.5%
		3000	169	4	1
Palm Canyon Drive (West of Hoberg Road)	45	100%	99%	0.5%	0.5%
		1500	86	0	0

Future Overall Traffic Information					
Roadway Name	Speed Limit (mph)	Truck Percentage (%) and AWT			
		Total % AWT	Auto	Medium Truck	Heavy Truck
Montezuma Valley Road (Northbound)	45	100%	97%	2.5%	0.5%
		5000	281	7	1
Palm Canyon Drive (East of Hoberg Road)	45	100%	97%	2.5%	0.5%
		6520	367	9	2
Palm Canyon Drive (West of Hoberg Road)	45	100%	99%	0.5%	0.5%
		1500	86	0	0

CNEL Adjustment Calculation Sheet for TNM Results

Current Calculated Noise Level			
Receiver Identification	TNM Result (L_{eq})	Adjustment (dB)	CNEL
On-Site Measurement Location	59.8	2.0	61.8

Future Calculated Noise Level			
Receiver Identification	TNM Result (L_{eq})	Adjustment (dB)	CNEL
On-Site Measurement Location	63.4	2.0	65.4

Current and Future (2030) Calculated Noise Contour			
Receiver Identification	TNM Result (L_{eq})	Adjustment (dB)	CNEL
60 CNEL	58.0	2.0	60.0
55 CNEL	53.0	2.0	55.0
50 CNEL	48.0	2.0	50.0

Future Calculated Noise Impact at Center of Proposed Building Envelopes				
Receiver Identification	Receiver Location	TNM Result (L_{eq})	Adjustment (dB)	Traffic CNEL
R-1	Lot 1	23.8	2	25.8
R-2	Lot 2	23.9	2	25.9
R-3	Lot 3	25.0	2	27.0
R-4	Lot 4	25.6	2	27.6
R-5	Lot 5	27.6	2	29.6
R-6	Lot 6	30.1	2	32.1
R-7	Lot 7	31.3	2	33.3
R-8	Lot 8	30.5	2	32.5

Future Calculated Noise Impact at Center of Proposed Building Envelopes				
Receiver Identification	**Receiver Location**	**TNM Result (L_{eq})**	**Adjustment (dB)**	**Traffic CNEL**
R-9	Lot 9	31.0	2	33.0
R-10	Lot 10	32.9	2	34.9
R-11	Lot 12	35.3	2	37.3
R-12	Lot 13	33.4	2	35.4
R-13	Lot 14	30.9	2	32.9
R-14	Lot 15	29.6	2	31.6
R-15	Lot 16	29.2	2	31.2
R-16	Lot 17	27.4	2	29.4
R-17	Lot 18	27.5	2	29.5
R-18	Lot 1	25.4	2	27.4
R-19	Lot 2	25.0	2	27.0
R-20	Lot 3	26.1	2	28.1
R-21	Lot 4	27.6	2	29.6
R-22	Lot 5	27.8	2	29.8
R-23	Lot 6	29.6	2	31.6
R-24	Lot 7	29.8	2	31.8
R-25	Lot 8	32.6	2	34.6
R-26	Lot 9	33.9	2	35.9
R-27	Lot 10	35.6	2	37.6
R-28	Lot 12	38.8	2	40.8
R-29	Lot 13	37.1	2	39.1
R-30	Lot 14	32.8	2	34.8
R-31	Lot 15	29.6	2	31.6
R-32	Lot 16	29.0	2	31.0
R-33	Lot 17	28.2	2	30.2
R-34	Lot 18	27.4	2	29.4

EILAR ASSOCIATES: Calibration to On-site Measurement

Prepared by	Mark Sturino		
Project Number	A61222N1	Client Name	KRS Development, Inc,
Project Name	Borrego Springs 50		401 (K) Retire
Run Title	Calibration to On-site Measurement	Attention	Kent Smith

Roadways		Points										
				Coordinates (pavement)			Flow Control			Segment		
Name	Width	Name	No.	x	y	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	On Struct?	
	ft			ft	ft	ft		mph	%			
W Palm Canyon WB	12	point22	22	-6.0	-6.0	767.00				Average		
		point2	2	-6.0	-1000.0	795.00						
W Palm Canyon EB"	12	point3	3	6.0	-1000.0	795.00				Average		
		point33	33	6.0	-6.0	767.00				Average		
		point34	34	11.0	6.0	767.00				Average		
			0	14.0	18.0	767.00						
E Palm Canyon WB"	12	point5	5	-14.0	1000.0	736.00				Average		
		point25	25	-14.0	18.0	767.00				Average		
		point6	6	-11.0	6.0	767.00				Average		
		point31	31	-6.0	-6.0	767.00						
E Palm Canyon EB"	12	point29	29	14.0	18.0	767.00				Average		
		point30	30	14.0	1000.0	736.00						
Montezuma Valley Rd NB (1)"	12	point9	9	1000.0	6.0	782.00				Average		
		point10	10	11.0	6.0	767.00						
Montezuma Valley Rd NB (2)"	12	point11	11	1000.0	18.0	782.00				Average		
		point12	12	14.0	18.0	767.00						
Montezuma Valley Rd SB (2)"	12	point15	15	-6.0	-6.0	767.00				Average		
		point27	27	6.0	-6.0	767.00				Average		
		point16	16	1000.0	-6.0	782.00						
Montezuma Valley Rd NB2 (1)	12	point19	19	11.0	6.0	767.00	Stop	0	100	Average		
		point20	20	-6.0	-6.0	767.00						

Roadways	Points											
Name	Name	No.	Segment									
			Autos		Mtrucks		Htrucks		Buses		Motorcycles	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
			veh/hr	mph								
W Palm Canyon WB	point22	22	36	45	4	45	0	0	0	0	0	0
	point2	2										
W Palm Canyon EB	point3	3	24	45	0	0	0	0	0	0	0	0
	point33	33	24	45	0	0	0	0	0	0	0	0
	point34	34	24	45	0	0	0	0	0	0	0	0
		0										
E Palm Canyon WB	point5	5	24	45	8	45	4	45	0	0	0	0
	point25	25	24	45	8	45	4	45	0	0	0	0
	point6	6	24	45	8	45	4	45	0	0	0	0
	point31	31										
E Palm Canyon EB"	point29	29	44	45	0	0	4	45	0	0	0	0
	point30	30										
Montezuma Valley Rd NB	point9	9	4	45	0	0	0	0	0	0	0	0
	point10	10										
Montezuma Valley Rd NB	point11	11	28	45	0	0	4	45	0	0	0	0
	point12	12										
Montezuma Valley Rd SB	point15	15	24	45	4	45	4	45	0	0	0	0
	point27	27	24	45	4	45	4	45	0	0	0	0
	point16	16										
Montezuma Valley Rd NB2	point19	19	4	45	0	0	0	0	0	0	0	0
	point20	20										

Terrain Lines	Points			
Name	No.	Coordinates (ground)		
		x	y	z
		ft	ft	ft
780	1	-500.0	-617.0	780.0
	2	-11.3	-405.7	780.0
770"	3	-1033.0	-617.0	770.0
	4	-11.3	-38.7	770.0
760"	5	-1633.0	-617.0	760.0
	6	-700.0	0.0	760.0
	7	-22.6	177.3	760.0
750"	8	-2017.0	-617.0	750.0
	9	-1200.0	0.0	750.0
740"	10	-2483.0	-617.0	740.0
	11	-1783	0	740
730"	12	-3067	-617	730
	13	-2333	-167	730
	14	-2283	0	730
720"	15	-3700	-617	720
	16	-2617	0	720
710"	17	-3700	-150	710
	18	-3200	50	710

Receivers							Sound Levels		
Name	No.	No. of Dwelling Units	Coordinates (pavement) x	y	z	Height above ground	Calculated Laeq 1hr With Barrier	Without Barrier	Noise Reduction
			ft	ft	ft	ft	dBA	dBA	dBA
On-Site Location	1	1	-42.00	-22.00	769.00	5.00	59.9	59.9	0.0

EILAR ASSOCIATES: Current Traffic Conditions

Prepared by	Mark Sturino		
Project Number	A61222N1	Client Name	KRS Development, Inc
Project Name	Borrego Springs 50		401 (K) Retire.
Run Title	Current Traffic Condition	Attention	Kent Smith

Roadways		Points										
				Coordinates (pavement)			Flow Control			Segment	
Name	Width	Name	No.	x	y	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	On Struct?
	ft			ft	ft	ft		mph	%		
W Palm Canyon WB	12	point22	22	-6.0	-6.0	767.00				Average	
		point2	2	-6.0	-1000.0	795.00					
W Palm Canyon EB"	12	point3	3	6.0	-1000.0	795.00				Average	
		point33	33	6.0	-6.0	767.00				Average	
		point34	34	11.0	6.0	767.00				Average	
			0	14.0	18.0	767.00					
E Palm Canyon WB"	12	point5	5	-14.0	1000.0	736.00				Average	
		point25	25	-14.0	18.0	767.00				Average	
		point6	6	-11.0	6.0	767.00				Average	
		point31	31	-6.0	-6.0	767.00					
E Palm Canyon EB"	12	point29	29	14.0	18.0	767.00				Average	
		point30	30	14.0	1000.0	736.00					
Montezuma Valley Rd NB (1)"	12	point9	9	1000.0	6.0	782.00				Average	
		point10	10	11.0	6.0	767.00					
Montezuma Valley Rd NB (2)"	12	point11	11	1000.0	18.0	782.00				Average	
		point12	12	14.0	18.0	767.00					
Montezuma Valley Rd SB (2)"	12	point15	15	-6.0	-6.0	767.00				Average	
		point27	27	6.0	-6.0	767.00				Average	
		point16	16	1000.0	-6.0	782.00					
Montezuma Valley Rd NB2 (1)	12	point19	19	11.0	6.0	767.00	Stop	0	100	Average	
		point20	20	-11.0	6.0	767.00					

Roadways	Points											
Name	Name	No.	Segment									
			Autos		Mtrucks		Htrucks		Buses		Motorcycles	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
			veh/hr	mph								
W Palm Canyon WB	point22	22	43	45	0	0	0	0	0	0	0	0
	point2	2										
W Palm Canyon EB	point3	3	43	45	0	0	0	0	0	0	0	0
	point33	33	43	45	0	0	0	0	0	0	0	0
	point34	34	43	45	0	0	0	0	0	0	0	0
		0										
E Palm Canyon WB	point5	5	84	45	2	45	1	45	0	0	0	0
	point25	25	84	45	2	45	1	45	0	0	0	0
	point6	6	84	45	2	45	1	45	0	0	0	0
	point31	31										
E Palm Canyon EB"	point29	29	85	45	2	45	0	0	0	0	0	0
	point30	30										
Montezuma Valley Rd NB (1)	point9	9	28	45	0	0	0	0	0	0	0	0
	point10	10										
Montezuma Valley Rd NB (2)	point11	11	28	45	1	45	1	45	0	0	0	0
	point12	12										
Montezuma Valley Rd SB (2)	point15	15	57	45	2	45	0	0	0	0	0	0
	point27	27	57	45	2	45	0	0	0	0	0	0
	point16	16										
Montezuma Valley Rd NB2 (1	point19	19	28	45	0	0	0	0	0	0	0	0
	point20	20										

Terrain Lines	Points			
Name	No.	Coordinates (ground)		
		x	y	z
		ft	ft	ft
780	1	-500.0	-617.0	780.0
	2	-11.3	-405.7	780.0
770"	3	-1033.0	-617.0	770.0
	4	-11.3	-38.7	770.0
760"	5	-1633.0	-617.0	760.0
	6	-700.0	0.0	760.0
	7	-22.6	177.3	760.0
750"	8	-2017.0	-617.0	750.0
	9	-1200.0	0.0	750.0
740"	10	-2483.0	-617.0	740.0

Receivers							Sound Levels		
			Coordinates (pavement)				Calculated Laeq 1hr		
Name	No.	No. of Dwelling Units	x	y	z	Height above ground	With Barrier	Without Barrier	Noise Reduction
			ft	ft	ft	ft	dBA	dBA	dBA
On-Site Location	1	1	-42.00	-22.00	769.00	5.00	59.8	59.8	0.0
R-1	3	1	-20.00	-90.00	770.00	5.00	60.6	60.6	0.0
R-2	4	1	-20.00	-160.00	772.00	5.00	60.4	60.4	0.0
R-3	5	1	-20.00	-230.00	774.00	5.00	60.3	60.3	0.0
R-4	6	1	-20.00	-300.00	776.00	5.00	60.2	60.2	0.0
R-5	7	1	-20.00	-370.00	778.00	5.00	60.2	60.2	0.0
R-6	8	1	-20.00	-440.00	780.00	5.00	60.2	60.2	0.0
R-7	9	1	-20.00	-510.00	782.00	5.00	60.3	60.3	0.0
R-8	10	1	-20.00	-580.00	784.00	5.00	60.2	60.2	0.0
R-9	11	1	-90.00	-20.00	767.00	5.00	54.0	54.0	0.0
R-10	12	1	-90.00	-90.00	770.00	5.00	52.5	52.5	0.0
R-11	13	1	-90.00	-160.00	771.00	5.00	51.5	51.5	0.0
R-12	14	1	-90.00	-230.00	773.00	5.00	50.7	50.7	0.0
R-13	15	1	-90.00	-300.00	775.00	5.00	50.7	50.7	0.0
R-14	16	1	-90.00	-370.00	777.00	5.00	50.4	50.4	0.0
R-15	17	1	-90.00	-440.00	779.00	5.00	50.4	50.4	0.0
R-16	18	1	-90.00	-510.00	781.00	5.00	50.1	50.1	0.0
R-17	19	1	-90.00	-580.00	783.00	5.00	50.2	50.2	0.0
R-18	20	1	-160.00	-20.00	767.00	5.00	48.8	48.8	0.0
R-19	21	1	-160.00	-90.00	768.00	5.00	47.9	47.9	0.0
R-20	22	1	-160.00	-160.00	770.00	5.00	46.7	46.7	0.0
R-21	23	1	-160.00	-230.00	772.00	5.00	45.6	45.6	0.0
R-22	24	1	-160.00	-300.00	774.00	5.00	44.9	44.9	0.0
R-23	25	1	-160.00	-370.00	776.00	5.00	44.5	44.5	0.0
R-24	26	1	-160.00	-440.00	778.00	5.00	44.1	44.1	0.0
R-25	27	1	-160.00	-510.00	780.00	5.00	44.0	44.0	0.0
R-26	28	1	-160.00	-580.00	782.00	5.00	44.0	44.0	0.0
R-27	29	1	-230.00	-20.00	766.00	5.00	46.0	46.0	0.0
R-28	30	1	-230.00	-90.00	768.00	5.00	45.3	45.3	0.0
R-29	31	1	-230.00	-160.00	770.00	5.00	44.5	44.5	0.0
R-30	32	1	-230.00	-230.00	772.00	5.00	43.2	43.2	0.0
R-31	33	1	-230.00	-300.00	774.00	5.00	42.4	42.4	0.0
R-32	34	1	-230.00	-370.00	776.00	5.00	41.7	41.7	0.0
R-33	35	1	-230.00	-440.00	778.00	5.00	41.4	41.4	0.0
R-34	36	1	-230.00	-510.00	780.00	5.00	40.8	40.8	0.0
R-35	37	1	-230.00	-580.00	782.00	5.00	40.6	40.6	0.0
R-36	38	1	-300.00	-20.00	764.00	5.00	43.8	43.8	0.0
R-37	39	1	-300.00	-90.00	766.00	5.00	43.3	43.3	0.0
R-38	40	1	-300.00	-160.00	768.00	5.00	42.4	42.4	0.0
R-39	41	1	-300.00	-230.00	770.00	5.00	41.4	41.4	0.0
R-40	42	1	-300.00	-300.00	772.00	5.00	40.6	40.6	0.0
R-41	43	1	-300.00	-370.00	774.00	5.00	39.6	39.6	0.0
R-42	44	1	-300.00	-440.00	777.00	5.00	39.6	39.6	0.0
R-43	45	1	-300.00	-510.00	780.00	5.00	39.3	39.3	0.0
R-44	46	1	-300.00	-580.00	782.00	5.00	38.8	38.8	0.0
R-45	47	1	-370.00	-20.00	762.00	5.00	41.4	41.4	0.0
R-46	48	1	-370.00	-90.00	764.00	5.00	41.5	41.5	0.0
R-47	49	1	-370.00	-160.00	766.00	5.00	40.3	40.3	0.0
R-48	50	1	-370.00	-230.00	768.00	5.00	38.9	38.9	0.0
R-49	51	1	-370.00	-300.00	771.00	5.00	38.6	38.6	0.0
R-50	52	1	-370.00	-370.00	774.00	5.00	38.1	38.1	0.0
R-51	53	1	-370.00	-440.00	777.00	5.00	37.9	37.9	0.0
R-52	54	1	-370.00	-510.00	780.00	5.00	37.4	37.4	0.0
R-53	55	1	-370.00	-580.00	782.00	5.00	36.9	36.9	0.0
R-54	56	1	-440.00	-20.00	762.00	5.00	39.7	39.7	0.0
R-55	57	1	-440.00	-90.00	764.00	5.00	39.9	39.9	0.0
R-56	58	1	-440.00	-160.00	766.00	5.00	39.2	39.2	0.0
R-57	59	1	-440.00	-230.00	769.00	5.00	38.1	38.1	0.0
R-58	60	1	-440.00	-300.00	772.00	5.00	37.9	37.9	0.0
R-59	61	1	-440.00	-370.00	774.00	5.00	36.7	36.7	0.0

R-60	62	1	-440.00	-440.00	776.00	5.00	36.2	36.2	0.0
R-61	63	1	-440.00	-510.00	778.00	5.00	35.8	35.8	0.0
R-62	64	1	-440.00	-580.00	780.00	5.00	35.3	35.3	0.0
R-63	65	1	-510.00	-20.00	762.00	5.00	38.3	38.3	0.0
R-64	66	1	-510.00	-90.00	764.00	5.00	39.0	39.0	0.0
R-65	67	1	-510.00	-160.00	766.00	5.00	38.5	38.5	0.0
R-66	68	1	-510.00	-230.00	768.00	5.00	37.1	37.1	0.0
R-67	69	1	-510.00	-300.00	770.00	5.00	36.4	36.4	0.0
R-68	70	1	-510.00	-370.00	772.00	5.00	36.1	36.1	0.0
R-69	71	1	-510.00	-440.00	774.00	5.00	34.9	34.9	0.0
R-70	72	1	-510.00	-510.00	777.00	5.00	34.7	34.7	0.0
R-71	73	1	-510.00	-580.00	779.00	5.00	34.1	34.1	0.0
R-72	74	1	-580.00	-20.00	762.00	5.00	37.1	37.1	0.0
R-73	75	1	-580.00	-90.00	764.00	5.00	38.1	38.1	0.0
R-74	76	1	-580.00	-160.00	766.00	5.00	37.4	37.4	0.0
R-75	77	1	-580.00	-230.00	768.00	5.00	35.9	35.9	0.0
R-76	78	1	-580.00	-300.00	770.00	5.00	35.7	35.7	0.0
R-77	79	1	-580.00	-370.00	772.00	5.00	35.0	35.0	0.0
R-78	80	1	-580.00	-440.00	774.00	5.00	34.7	34.7	0.0
R-79	81	1	-580.00	-510.00	776.00	5.00	33.7	33.7	0.0
R-80	82	1	-580.00	-580.00	778.00	5.00	33.4	33.4	0.0
R-81	85	1	-55.00	-20.00	770.00	5.00	58.5	58.5	0.0
R-82	87	1	-55.00	-55.00	770.00	5.00	57.3	57.3	0.0
R-83	88	1	-90.00	-55.00	770.00	5.00	53.4	53.4	0.0
R-84	89	1	-55.00	-90.00	770.00	5.00	56.4	56.4	0.0

EILAR ASSOCIATES: Future Traffic Conditions

Prepared by	Mark Sturino		
Project Number	A61222N1	Client Name	KRS Development, Inc
Project Name	Borrego Springs 50		401 (K) Retire
Run Title	Future Traffic Condition	Attention	Kent Smith

Roadways		Points										
				Coordinates (pavement)			Flow Control			Segment		
Name	Width	Name	No.	x	y	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	On Struct?	
	ft			ft	ft	ft		mph	%			
W Palm Canyon WB	12	point22	22	-6.0	-6.0	767.00				Average		
		point2	2	-6.0	-1000.0	795.00						
W Palm Canyon EB"	12	point3	3	6.0	-1000.0	795.00				Average		
		point33	33	6.0	-6.0	767.00				Average		
		point34	34	11.0	6.0	767.00				Average		
			0	14.0	18.0	767.00						
E Palm Canyon WB"	12	point5	5	-14.0	1000.0	736.00				Average		
		point25	25	-14.0	18.0	767.00				Average		
		point6	6	-11.0	6.0	767.00				Average		
		point31	31	-6.0	-6.0	767.00						
E Palm Canyon EB"	12	point29	29	14.0	18.0	767.00				Average		
		point30	30	14.0	1000.0	736.00						
Montezuma Valley Rd NB (1)"	12	point9	9	1000.0	6.0	782.00				Average		
		point10	10	11.0	6.0	767.00						
Montezuma Valley Rd NB (2)"	12	point11	11	1000.0	18.0	782.00				Average		
		point12	12	14.0	18.0	767.00						
Montezuma Valley Rd SB"	12	point15	15	-6.0	-6.0	767.00				Average		
		point27	27	6.0	-6.0	767.00				Average		
		point16	16	1000.0	-6.0	782.00						
Montezuma Valley Rd NB2 (1)"	12	point19	19	11.0	6.0	767.00	Stop	0	100	Average		
		point20	20	-6.0	-6.0	767.00						

Roadways	Points											
Name	Name	No.	Segment									
			Autos		Mtrucks		Htrucks		Buses		Motorcycles	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
			veh/hr	mph								
W Palm Canyon WB	point22	22	43	45	0	0	0	0	0	0	0	0
	point2	2										
W Palm Canyon EB	point3	3	43	45	0	0	0	0	0	0	0	0
	point33	33	43	45	0	0	0	0	0	0	0	0
	point34	34	43	45	0	0	0	0	0	0	0	0
		0										
E Palm Canyon WB	point5	5	183	45	5	45	1	45	0	0	0	0
	point25	25	183	45	5	45	1	45	0	0	0	0
	point6	6	183	45	5	45	1	45	0	0	0	0
	point31	31										
E Palm Canyon EB"	point29	29	184	45	4	45	1	45	0	0	0	0
	point30	30										
Montezuma Valley Rd NB	point9	9	70	55	1	55	0	0	0	0	0	0
	point10	10										
Montezuma Valley Rd NB	point11	11	71	55	2	55	1	55	0	0	0	0
	point12	12										
Montezuma Valley Rd SB	point15	15	140	55	4	55	0	0	0	0	0	0
	point27	27	140	55	4	55	0	0	0	0	0	0
	point16	16										
Montezuma Valley Rd NB	point19	19	70	55	1	55	0	0	0	0	0	0
	point20	20										

Terrain Lines	Points			
Name	No.	Coordinates (ground)		
		x	y	z
		ft	ft	ft
780	1	-500.0	-617.0	780.0
	2	-11.3	-405.7	780.0
770"	3	-1033.0	-617.0	770.0
	4	-11.3	-38.7	770.0
760"	5	-1633.0	-617.0	760.0
	6	-700.0	0.0	760.0
	7	-22.6	177.3	760.0
750"	8	-2017.0	-617.0	750.0
	9	-1200.0	0.0	750.0
740"	10	-2483.0	-617.0	740.0
	11	-1783	0	740
730"	12	-3067	-617	730
	13	-2333	-167	730
	14	-2283	0	730
720"	15	-3700	-617	720
	16	-2617	0	720
710"	17	-3700	-150	710
	18	-3200	50	710

Receivers							Sound Levels		
			Coordinates (pavement)				Calculated Laeq 1hr		
Name	No.	No. of Dwelling Units	x	y	z	Height above ground	With Barrier	Without Barrier	Noise Reduction
			ft	ft	ft	ft	dBA	dBA	dBA
On-Site Location	1.00	1.00	-42.00	-22.00	769.00	5.00	63.4	63.4	0.0
R-1	3.00	1.00	-20.00	-90.00	770.00	5.00	62.0	62.0	0.0
R-2	4.00	1.00	-20.00	-160.00	772.00	5.00	61.1	61.1	0.0
R-3	5.00	1.00	-20.00	-230.00	774.00	5.00	60.5	60.5	0.0
R-4	6.00	1.00	-20.00	-300.00	776.00	5.00	60.4	60.4	0.0
R-5	7.00	1.00	-20.00	-370.00	778.00	5.00	60.3	60.3	0.0
R-6	8.00	1.00	-20.00	-440.00	780.00	5.00	60.3	60.3	0.0
R-7	9.00	1.00	-20.00	-510.00	782.00	5.00	60.3	60.3	0.0
R-8	10.00	1.00	-20.00	-580.00	784.00	5.00	60.2	60.2	0.0
R-9	11.00	1.00	-90.00	-20.00	767.00	5.00	57.7	57.7	0.0
R-10	12.00	1.00	-90.00	-90.00	770.00	5.00	56.0	56.0	0.0
R-11	13.00	1.00	-90.00	-160.00	771.00	5.00	53.6	53.6	0.0
R-12	14.00	1.00	-90.00	-230.00	773.00	5.00	52.2	52.2	0.0
R-13	15.00	1.00	-90.00	-300.00	775.00	5.00	51.6	51.6	0.0
R-14	16.00	1.00	-90.00	-370.00	777.00	5.00	50.9	50.9	0.0
R-15	17.00	1.00	-90.00	-440.00	779.00	5.00	50.7	50.7	0.0
R-16	18.00	1.00	-90.00	-510.00	781.00	5.00	50.4	50.4	0.0
R-17	19.00	1.00	-90.00	-580.00	783.00	5.00	50.4	50.4	0.0
R-18	20.00	1.00	-160.00	-20.00	767.00	5.00	53.1	53.1	0.0
R-19	21.00	1.00	-160.00	-90.00	768.00	5.00	52.2	52.2	0.0
R-20	22.00	1.00	-160.00	-160.00	770.00	5.00	50.1	50.1	0.0
R-21	23.00	1.00	-160.00	-230.00	772.00	5.00	48.1	48.1	0.0
R-22	24.00	1.00	-160.00	-300.00	774.00	5.00	47.1	47.1	0.0
R-23	25.00	1.00	-160.00	-370.00	776.00	5.00	46.1	46.1	0.0
R-24	26.00	1.00	-160.00	-440.00	778.00	5.00	45.5	45.5	0.0
R-25	27.00	1.00	-160.00	-510.00	780.00	5.00	45.0	45.0	0.0
R-26	28.00	1.00	-160.00	-580.00	782.00	5.00	44.7	44.7	0.0
R-27	29.00	1.00	-230.00	-20.00	766.00	5.00	50.5	50.5	0.0
R-28	30.00	1.00	-230.00	-90.00	768.00	5.00	49.8	49.8	0.0
R-29	31.00	1.00	-230.00	-160.00	770.00	5.00	48.6	48.6	0.0
R-30	32.00	1.00	-230.00	-230.00	772.00	5.00	46.5	46.5	0.0
R-31	33.00	1.00	-230.00	-300.00	774.00	5.00	45.4	45.4	0.0
R-32	34.00	1.00	-230.00	-370.00	776.00	5.00	44.1	44.1	0.0
R-33	35.00	1.00	-230.00	-440.00	778.00	5.00	43.4	43.4	0.0
R-34	90.00	1.00	-230.00	-510.00	780.00	5.00	42.6	42.6	0.0
R-35	91.00	1.00	-230.00	-580.00	782.00	5.00	42.0	42.0	0.0
R-36	92.00	1.00	-300.00	-20.00	764.00	5.00	48.2	48.2	0.0
R-37	93.00	1.00	-300.00	-90.00	766.00	5.00	47.8	47.8	0.0
R-38	94.00	1.00	-300.00	-160.00	768.00	5.00	46.5	46.5	0.0
R-39	95.00	1.00	-300.00	-230.00	770.00	5.00	44.7	44.7	0.0
R-40	96.00	1.00	-300.00	-300.00	772.00	5.00	43.8	43.8	0.0
R-41	97.00	1.00	-300.00	-370.00	774.00	5.00	42.2	42.2	0.0
R-42	98.00	1.00	-300.00	-440.00	777.00	5.00	41.8	41.8	0.0
R-43	99.00	1.00	-300.00	-510.00	780.00	5.00	41.3	41.3	0.0
R-44	100.00	1.00	-300.00	-580.00	782.00	5.00	40.8	40.8	0.0
R-45	101.00	1.00	-370.00	-20.00	762.00	5.00	45.7	45.7	0.0
R-46	102.00	1.00	-370.00	-90.00	764.00	5.00	46.1	46.1	0.0
R-47	103.00	1.00	-370.00	-160.00	766.00	5.00	44.6	44.6	0.0
R-48	104.00	1.00	-370.00	-230.00	768.00	5.00	42.4	42.4	0.0
R-49	105.00	1.00	-370.00	-300.00	771.00	5.00	41.9	41.9	0.0
R-50	106.00	1.00	-370.00	-370.00	774.00	5.00	41.3	41.3	0.0
R-51	107.00	1.00	-370.00	-440.00	777.00	5.00	40.8	40.8	0.0
R-52	108.00	1.00	-370.00	-510.00	780.00	5.00	40.0	40.0	0.0
R-53	109.00	1.00	-370.00	-580.00	782.00	5.00	39.6	39.6	0.0
R-54	110.00	1.00	-440.00	-20.00	762.00	5.00	44.0	44.0	0.0
R-55	111.00	1.00	-440.00	-90.00	764.00	5.00	44.4	44.4	0.0
R-56	112.00	1.00	-440.00	-160.00	766.00	5.00	43.7	43.7	0.0
R-57	113.00	1.00	-440.00	-230.00	769.00	5.00	41.8	41.8	0.0
R-58	114.00	1.00	-440.00	-300.00	772.00	5.00	41.9	41.9	0.0
R-59	115.00	1.00	-440.00	-370.00	774.00	5.00	40.0	40.0	0.0

R-60	116.00	1.00	-440.00	-440.00	776.00	5.00	39.2	39.2	0.0
R-61	117.00	1.00	-440.00	-510.00	778.00	5.00	38.7	38.7	0.0
R-62	118.00	1.00	-440.00	-580.00	780.00	5.00	38.0	38.0	0.0
R-63	119.00	1.00	-510.00	-20.00	762.00	5.00	42.6	42.6	0.0
R-64	120.00	1.00	-510.00	-90.00	764.00	5.00	43.7	43.7	0.0
R-65	121.00	1.00	-510.00	-160.00	766.00	5.00	43.0	43.0	0.0
R-66	122.00	1.00	-510.00	-230.00	768.00	5.00	41.2	41.2	0.0
R-67	123.00	1.00	-510.00	-300.00	770.00	5.00	40.1	40.1	0.0
R-68	124.00	1.00	-510.00	-370.00	772.00	5.00	39.5	39.5	0.0
R-69	125.00	1.00	-510.00	-440.00	774.00	5.00	37.9	37.9	0.0
R-70	126.00	1.00	-510.00	-510.00	777.00	5.00	37.7	37.7	0.0
R-71	127.00	1.00	-510.00	-580.00	779.00	5.00	36.9	36.9	0.0
R-72	128.00	1.00	-580.00	-20.00	762.00	5.00	41.4	41.4	0.0
R-73	129.00	1.00	-580.00	-90.00	764.00	5.00	43.0	43.0	0.0
R-74	130.00	1.00	-580.00	-160.00	766.00	5.00	41.9	41.9	0.0
R-75	131.00	1.00	-580.00	-230.00	768.00	5.00	39.8	39.8	0.0
R-76	132.00	1.00	-580.00	-300.00	770.00	5.00	39.4	39.4	0.0
R-77	133.00	1.00	-580.00	-370.00	772.00	5.00	38.6	38.6	0.0
R-78	134.00	1.00	-580.00	-440.00	774.00	5.00	38.3	38.3	0.0
R-79	135.00	1.00	-580.00	-510.00	776.00	5.00	36.8	36.8	0.0
R-80	136.00	1.00	-580.00	-580.00	778.00	5.00	36.3	36.3	0.0
R-81	137.00	1.00	-55.00	-20.00	770.00	5.00	62.1	62.1	0.0
R-82	139.00	1.00	-55.00	-55.00	770.00	5.00	60.7	60.7	0.0
R-83	140.00	1.00	-90.00	-55.00	770.00	5.00	57.6	57.6	0.0
R-84	141.00	1.00	-55.00	-90.00	770.00	5.00	58.9	58.9	0.0

EILAR ASSOCIATES: Noise Impacts at Center of Lots

Prepared by	Mark Sturino		
Project Number	A61222N1	Client Name	KRS Development, Inc
Project Name	Borrego Springs 50		401 (K) Retire
Run Title	Vehicular Noise Impacts at Center of Building Envelopes	Attention	Kent Smith

Roadways		Points										
				Coordinates (pavement)			Flow Control			Segment		
Name	Width	Name	No.	x	y	z	Control Device	Speed Constraint	Percent Vehicles Affected	Pavement Type	On Struct?	
	ft			ft	ft	ft		mph	%			
W Palm Canyon WB	12	point22	22	-6.0	-6.0	767.00				Average		
		point2	2	-6.0	-1000.0	795.00						
W Palm Canyon EB"	12	point3	3	6.0	-1000.0	795.00				Average		
		point33	33	6.0	-6.0	767.00				Average		
		point34	34	11.0	6.0	767.00				Average		
			0	14.0	18.0	767.00						
E Palm Canyon WB"	12	point5	5	-14.0	1000.0	736.00				Average		
		point25	25	-14.0	18.0	767.00				Average		
		point6	6	-11.0	6.0	767.00				Average		
		point31	31	-6.0	-6.0	767.00						
E Palm Canyon EB"	12	point29	29	14.0	18.0	767.00				Average		
		point30	30	14.0	1000.0	736.00						
Montezuma Valley Rd NB (1)"	12	point9	9	1000.0	6.0	782.00				Average		
		point10	10	11.0	6.0	767.00						
Montezuma Valley Rd NB (2)"	12	point11	11	1000.0	18.0	782.00				Average		
		point12	12	14.0	18.0	767.00						
Montezuma Valley Rd SB"	12	point15	15	-6.0	-6.0	767.00				Average		
		point27	27	6.0	-6.0	767.00				Average		
		point16	16	1000.0	-6.0	782.00						
Montezuma Valley Rd NB2 (1)	12	point19	19	11.0	6.0	767.00	Stop	0	100	Average		
		point20	20	-6.0	-6.0	767.00						

Roadways	Points											
Name	Name	No.	Segment									
			Autos		Mtrucks		Htrucks		Buses		Motorcycles	
			Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
			veh/hr	mph								
W Palm Canyon WB	point22	22	43	45	0	0	0	0	0	0	0	0
	point2	2										
W Palm Canyon EB	point3	3	43	45	0	0	0	0	0	0	0	0
	point33	33	43	45	0	0	0	0	0	0	0	0
	point34	34	43	45	0	0	0	0	0	0	0	0
		0										
E Palm Canyon WB	point5	5	183	45	5	45	1	45	0	0	0	0
	point25	25	183	45	5	45	1	45	0	0	0	0
	point6	6	183	45	5	45	1	45	0	0	0	0
	point31	31										
E Palm Canyon EB"	point29	29	184	45	4	45	1	45	0	0	0	0
	point30	30										
Montezuma Valley Rd NB	point9	9	70	55	1	55	0	0	0	0	0	0
	point10	10										
Montezuma Valley Rd NB	point11	11	71	55	2	55	1	55	0	0	0	0
	point12	12										
Montezuma Valley Rd SB	point15	15	140	55	4	55	0	0	0	0	0	0
	point27	27	140	55	4	55	0	0	0	0	0	0
	point16	16										
Montezuma Valley Rd NB	point19	19	70	55	1	55	0	0	0	0	0	0
	point20	20										

Terrain Lines	Points			
Name	No.	Coordinates (ground)		
		x	y	z
		ft	ft	ft
780	1	-500.0	-617.0	780.0
	2	-11.3	-405.7	780.0
770"	3	-1033.0	-617.0	770.0
	4	-11.3	-38.7	770.0
760"	5	-1633.0	-617.0	760.0
	6	-700.0	0.0	760.0
	7	-22.6	177.3	760.0
750"	8	-2017.0	-617.0	750.0
	9	-1200.0	0.0	750.0
740"	10	-2483.0	-617.0	740.0
	11	-1783	0	740
730"	12	-3067	-617	730
	13	-2333	-167	730
	14	-2283	0	730
720"	15	-3700	-617	720
	16	-2617	0	720
710"	17	-3700	-150	710
	18	-3200	50	710

Receivers							Sound Levels		
			Coordinates (pavement)				Calculated Laeq 1hr		
Name	No.	No. of Dwelling Units	x	y	z	Height above ground	With Barrier	Without Barrier	Noise Reduction
			ft	ft	ft	ft	dBA	dBA	dBA
On-Site Location	1	1	-42.00	-22.00	769.00	5.00	63.4	63.4	0.0
Receiver2"	2	1	-3514.30	-150.00	714.00	5.00	23.8	23.8	0.0
Receiver3"	3	1	-3578.60	-428.60	718.00	5.00	23.9	23.9	0.0
Receiver4"	4	1	-3257.10	-428.60	724.00	5.00	25.0	25.0	0.0
Receiver5"	5	1	-2978.60	-471.40	730.00	5.00	25.6	25.6	0.0
Receiver6"	6	1	-2635.70	-471.40	735.00	5.00	27.6	27.6	0.0
Receiver7"	7	1	-2228.60	-364.30	739.00	5.00	30.1	30.1	0.0
Receiver8"	8	1	-1971.40	-471.40	748.00	5.00	31.3	31.3	0.0
Receiver9"	9	1	-1735.70	-364.30	750.00	5.00	30.5	30.5	0.0
Receiver10"	10	1	-1457.10	-407.10	758.00	5.00	31.0	31.0	0.0
Receiver11"	11	1	-1178.60	-471.40	764.00	5.00	32.9	32.9	0.0
Receiver12"	12	1	-1071.40	-235.70	759.00	5.00	35.3	35.3	0.0
Receiver13"	13	1	-1328.60	-128.60	751.00	5.00	33.4	33.4	0.0
Receiver14"	14	1	-1821.40	-128.60	744.00	5.00	30.9	30.9	0.0
Receiver15"	15	1	-2250.00	-150.00	735.00	5.00	29.6	29.6	0.0
Receiver16"	16	1	-2507.10	-214.30	730.00	5.00	29.2	29.2	0.0
Receiver17"	17	1	-2807.10	-150.00	722.00	5.00	27.4	27.4	0.0
Receiver18"	18	1	-3085.70	-192.90	720.00	5.00	27.5	27.5	0.0
Receiver19"	19	1	-3514.30	-150.00	714.00	15.00	25.4	25.4	0.0
Receiver20"	20	1	-3578.60	-428.60	718.00	15.00	25.0	25.0	0.0
Receiver21"	21	1	-3257.10	-428.60	724.00	15.00	26.1	26.1	0.0
Receiver22"	22	1	-2978.60	-471.40	730.00	15.00	27.6	27.6	0.0
Receiver23"	23	1	-2635.70	-471.40	735.00	15.00	27.8	27.8	0.0
Receiver24"	24	1	-2228.60	-364.30	739.00	15.00	29.6	29.6	0.0
Receiver25"	25	1	-1971.40	-471.40	748.00	15.00	29.8	29.8	0.0
Receiver26"	26	1	-1735.70	-364.30	750.00	15.00	32.6	32.6	0.0
Receiver27"	27	1	-1457.10	-407.10	758.00	15.00	33.9	33.9	0.0
Receiver28"	28	1	-1178.60	-471.40	764.00	15.00	35.6	35.6	0.0
Receiver29"	29	1	-1071.40	-235.70	759.00	15.00	38.8	38.8	0.0
Receiver30"	30	1	-1328.60	-128.60	751.00	15.00	37.1	37.1	0.0
Receiver31"	31	1	-1821.40	-128.60	744.00	15.00	32.8	32.8	0.0
Receiver32"	32	1	-2250.00	-150.00	735.00	15.00	29.6	29.6	0.0
Receiver33"	33	1	-2507.10	-214.30	730.00	15.00	29.0	29.0	0.0
Receiver34"	34	1	-2807.10	-150.00	722.00	15.00	28.2	28.2	0.0
Receiver35"	35	1	-3085.70	-192.90	720.00	15.00	27.4	27.4	0.0

APPENDIX D

County of San Diego Roadway Classification Changes

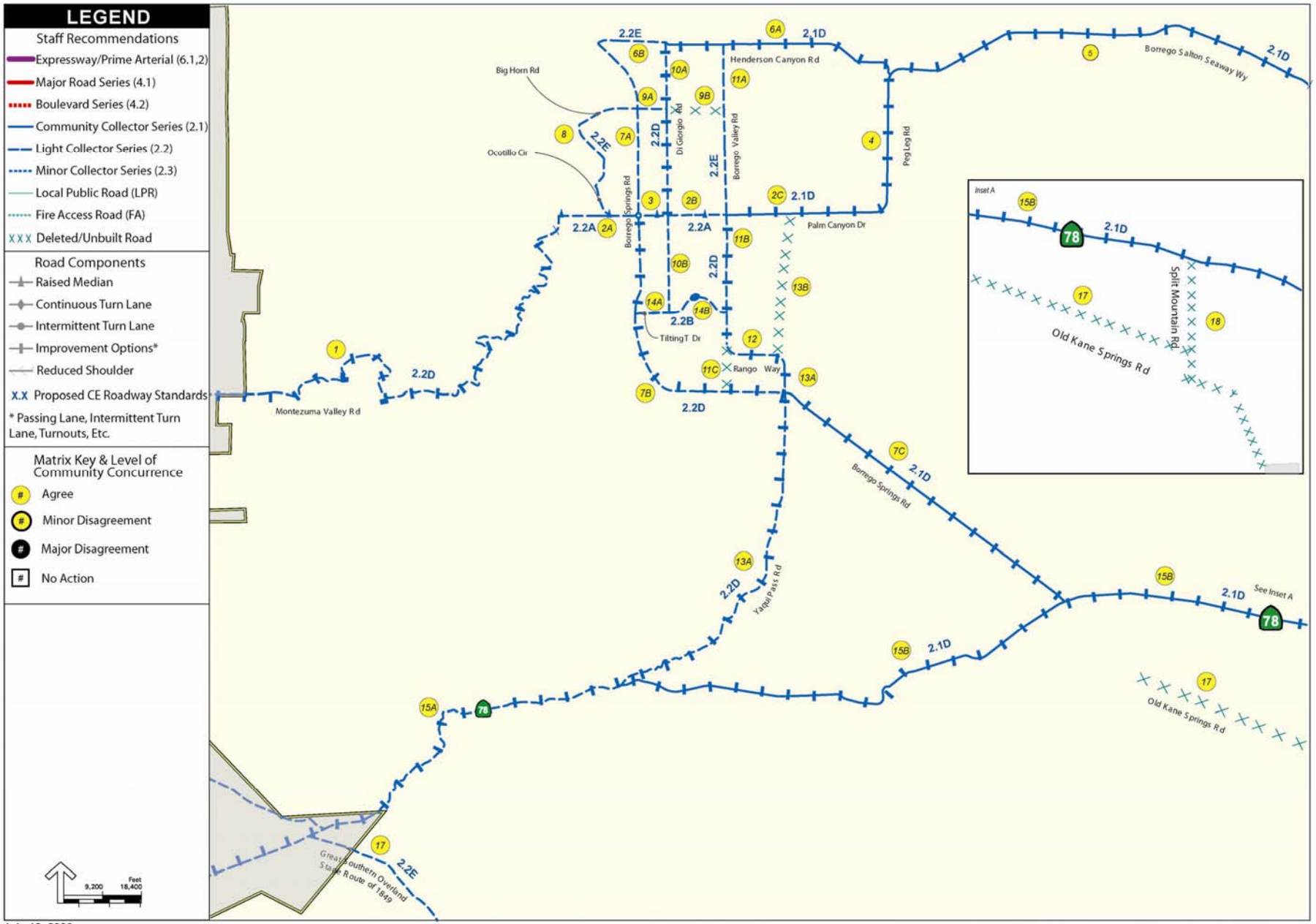
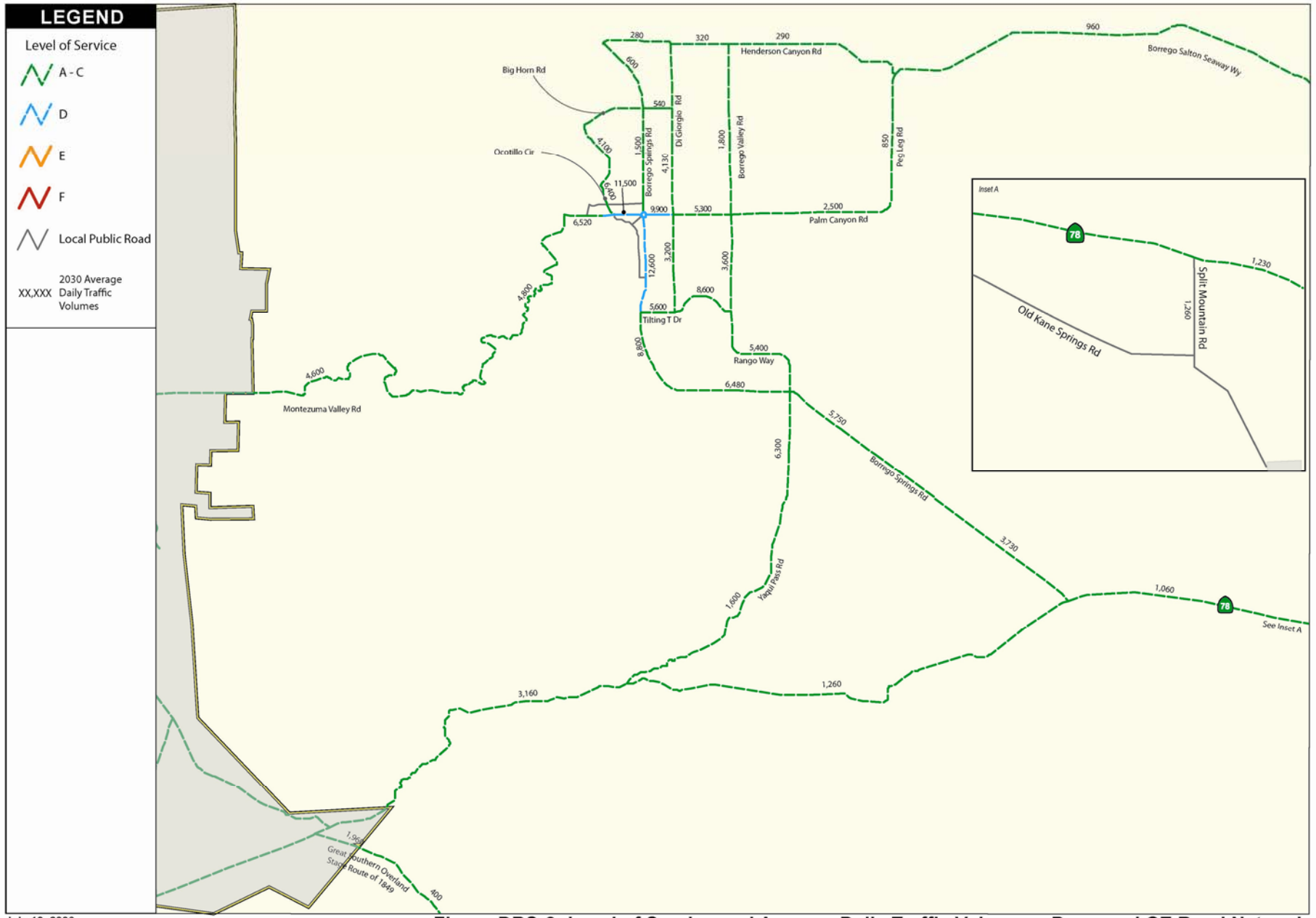


Figure DBS-1: Proposed CE Road Network



July 18, 2006

Figure DBS-2: Level of Service and Average Daily Traffic Volumes - Proposed CE Road Network

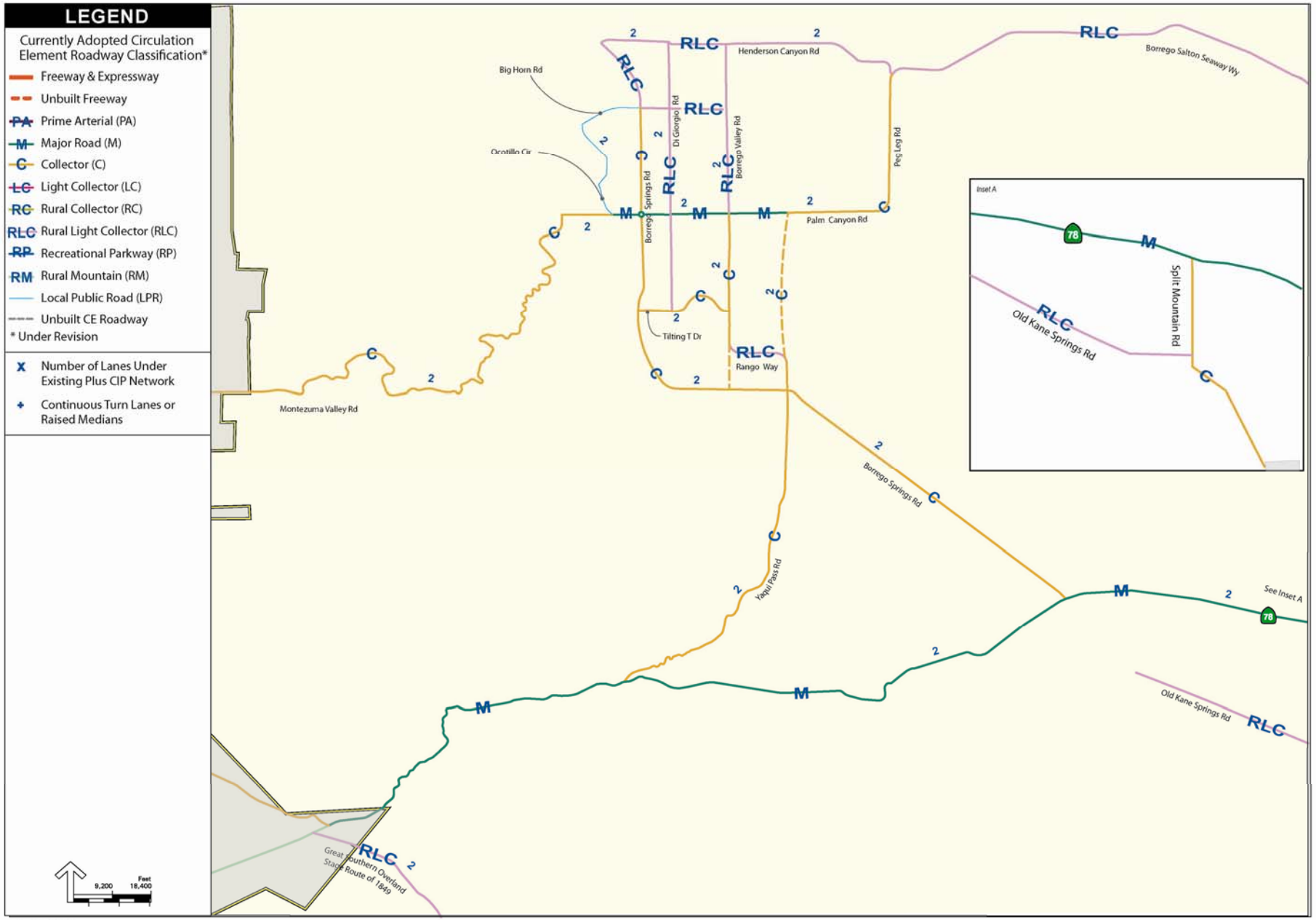


Figure DBS-4: Existing Plus CIP Network

	CE Road Segment	Road Network Recommendations	Basis for Staff Recommendation
1	**Montezuma Valley Road (SF 1406)** Segment: Ranchita to Palm Canyon Drive Existing Condition: 2 lanes (passing lanes in 2 areas) Current Classification: Collector Road (4 lanes)	**Downgrade Classification** 2.2D Light Collector with Improvement Options (2+ lanes) *Possible passing lane*s	• *Road Capacity* – Proposed classification will operate at an acceptable LOS
2A	**Palm Canyon Drive (SA 180)** Segment: Montezuma Valley Road to Christmas Circle Existing Condition: 2 lanes Current Classification: Collector Road / Major Road (4 lanes)	**Downgrade Classification** 2.2A Light Collector with Raised Median (2+ lanes)	• *Road Capacity* – Proposed classification will operate at an acceptable LOS • *Support Land Use Goals* – Community desires more pedestrian friendly road in the village than the Existing Circulation Element Classification
2B	**Palm Canyon Drive (SA 180)** Segment: Christmas Circle to Borrego Valley Road Existing Condition: 2 lanes Current Classification: Major Road (4+ lanes)	**Downgrade Classification** 2.2A Light Collector with Raised Median (2+ lanes)	• *Road Capacity* – A short segment of Palm Canyon Drive may operate at LOS. However the proposed road classification for the town center than a 4-lane road. In addition, the proposed classification would operate at an acceptable LOS if the entire local road network were incorporated into the SANDAG traffic model. • *Build Community Consensus* – Sponsor Group supports the recommendation because they desire a more pedestrian friendly road in the village • *Minimize Costs* – Proposed road costs less to build and maintain than the classification in the Existing General Plan

APPENDIX E

Pertinent Sections of the County of San Diego Noise Element to the General Plan

Part VIII
Noise Element
San Diego County General Plan

Adopted By
Board of Supervisors
February 20, 1975
Amended
September 27, 2006
GPA 06-008

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Policy 4b

Because exterior community noise equivalent levels (CNEL) above 60 decibels and/or interior CNEL above 45 decibels may have an adverse effect on public health and welfare, it is the policy of the County of San Diego that:

1. Whenever it appears that new *development* may result in any (existing or future) *noise sensitive land use* being subject to noise levels of CNEL equal to 60 *decibels (A)* or greater, an acoustical analysis shall be required.

2. If the acoustical analysis shows that noise levels at any *noise sensitive land use* will exceed CNEL equal to 60 decibels, modifications shall be made to the *development* which reduce the *exterior noise* level to less than CNEL of 60 *decibels (A)* and the *interior noise* level to less than CNEL of 45 *decibels (A)*.

3. If modifications are not made to the *development* in accordance with paragraph 2 above, the *development* shall not be approved unless a finding is made that there are specifically identified overriding social or economic considerations which warrant approval of the development without such modification; provided, however, if the acoustical study shows that sound levels for any noise sensitive land use will exceed a CNEL equal to 75 *decibels (A)* even with such modifications, the *development* shall not be approved irrespective of such social or economic considerations.

Definitions, Notes & Exceptions

"*Decibels (A)*" refers to A-weighted sound levels as noted on page VIII-2 of this Element.

"*Development*" means any physical development including but not limited to residences, commercial, or industrial facilities, roads, civic buildings, hospitals, schools, airports, or similar facilities.

"*Exterior noise*":

(a) For single family detached dwelling projects, "exterior noise" means noise measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum area:

(i) Net lot area up to 4,000 sq. ft.:	400 square feet
(ii) Net lot area 4,000 sq. ft. to 10 ac.:	10% of net lot area
(iii) Net lot area over 10 ac.:	1 ac.

(b) For all other projects, "exterior noise" means noise measured at all exterior areas which are provided for *group or private usable open space* purposes.

(c) For County road construction projects, the exterior noise level due to vehicular traffic impacting a noise sensitive area should not exceed the following values:

(i) Federally funded projects:	The Noise standard contained in applicable Federal Highway Administration Standards.
(ii) Other projects:	60 *decibels (A)*, except if the existing or projected noise level without the project is 58 *decibels (A)* or greater, a 3 *decibel (A)* increase is allowed, up to the maximum permitted by Federal Highway Administration Standards.

"*Group or Private Usable Open Space*" shall mean: Usable open space intended for common use by occupants of a *development*, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways (Group Usable Open Space); and usable open space intended for use of occupants of one dwelling unit, normally including yards, decks and balconies (Private Usable Open Space).

" *Interior noise*": The following exception shall apply: For rooms which are usually occupied only a part of the day (schools, libraries, or similar), the interior one-hour average sound level, due to noise outside, should not exceed 50 *decibels (A)*.

"*Noise sensitive land use*" means any residence, hospital, school, hotel, resort, library or any other facility where quiet is an important attribute of the environment.

Action Program 4b1 Recommend programs to soundproof buildings or redevelop areas where it is impossible to reduce existing source noise to acceptable levels.

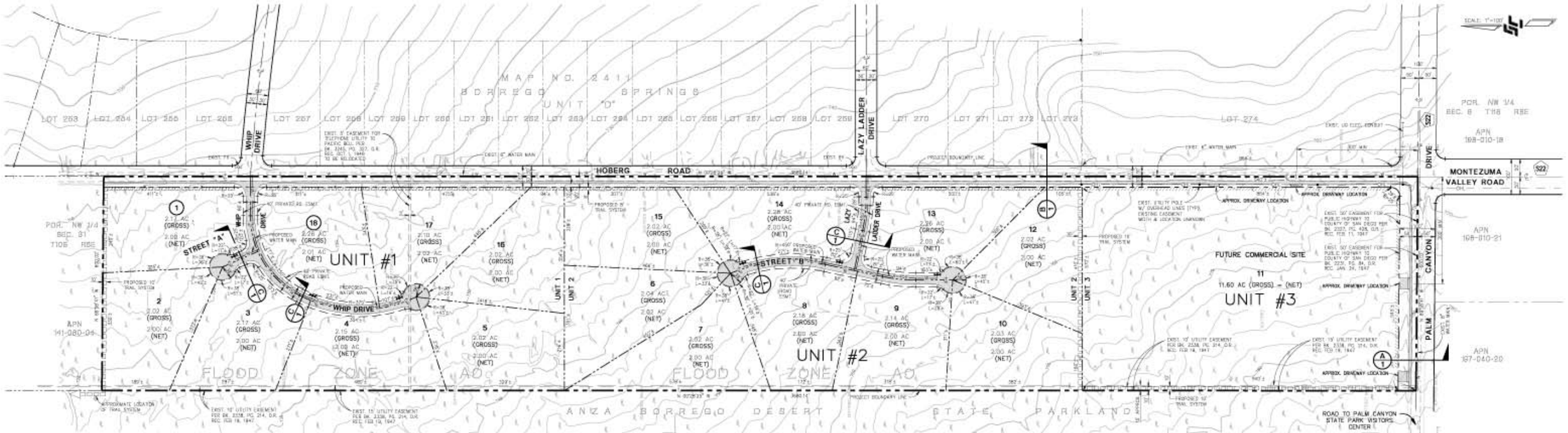
Action Program 4b2 Study the feasibility of extending the application of Section 1092, California Administrative Code dealing with noise insulation standards to single-family dwellings, and incorporating higher standards for reduction of exterior noise intrusion into structures.

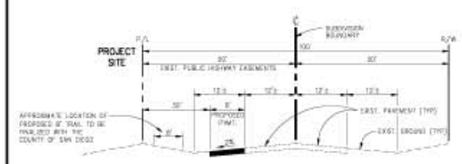
Action Program 4b3. Require present and projected noise level data to be included in Environmental Impact Reports. Designs to mitigate adverse noise impacts shall also be used.

APPENDIX F

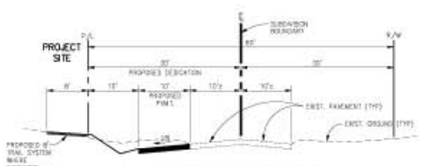
Tentative Tract Map, Slope Analysis and Grading Plan

VESTING TENTATIVE MAP
COUNTY OF SAN DIEGO TRACT 5511

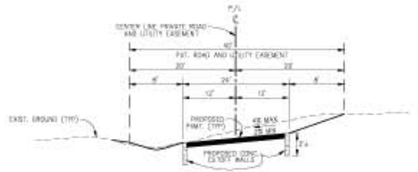




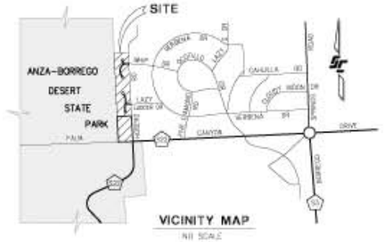
TYPICAL SECTION (PUBLIC)
PALM CANYON DRIVE
A/1 — NO SCALE



TYPICAL SECTION (PUBLIC)
HOBERG ROAD
B/1 — NO SCALE



TYPICAL SECTION (PRIVATE)
WHIP DRIVE, STREET "A", "B", LAZY LADDER DRIVE
C/1 — NO SCALE



VICINITY MAP
NO SCALE

GRADING NOTE
SEE PRELIMINARY GRADING PLAN FOR PROPOSED STREET GRADING.

APN 141-080-05
EXISTING AND PROPOSED ZONING

	ZONE	(1)	(2)
	USE REGULATIONS	RS5	C42
	NEIGHBORHOOD REGS.	✓	H
DEVELOPMENT REGULATIONS	DENSITY	1	S
	LOT SIZE	1 AC.	6,000 SF
	BUILDING TYPE	C	R
	MAXIMUM FLOOR AREA	--	--
	FLOOR AREA RATIO	--	--
	HEIGHT	G	G
	LOT COVERAGE	--	--
	SETBACK	C	V
	OPEN SPACE	--	--
SPECIAL AREA REGULATIONS		--	D

(1) NORTHERLY 2,740'±
(2) SOUTHERLY 940'±

SLOPE ANALYSIS TABLE*

0–15% SLOPES	163.8 AC	99.6%
15–25% SLOPES	0.2 AC.	0.1%
25–30% SLOPES	0.2 AC.	0.1%
30% OR GREATER SLOPES	0.0 AC.	0.0%
TOTAL	164.1 AC	100%

*SEE SLOPE ANALYSIS EXHIBIT INCLUDED WITH THIS SUBMITTAL.

LEGEND

DESCRIPTION	SYMBOL
PROPOSED LOT NUMBER	(1) TYPICAL (16)
SUBDIVISION BOUNDARY	
PROPOSED LOT LINE	
PROPOSED RIGHT-OF-WAY	
EXISTING RIGHT-OF-WAY	
PROPOSED EASEMENT LINE	
PROPOSED ACCESS RIGHTS RELINQUISHED	
EXISTING EASEMENT LINE	
EXISTING CONTOUR	5,317
PROPOSED PAVEMENT	
PROPOSED WATER MAIN	W
PROPOSED FIRE HYDRANT	
EXISTING WATER MAIN	W
EXISTING FIRE HYDRANT	
EXISTING OVERHEAD UTILITIES W/ UTILITY POLE	OHU

SPECIAL ASSESSMENT ACT STATEMENT
NO SPECIAL ASSESSMENT ACT PROCEEDING IS REQUESTED FOR THIS PROJECT.

LEGAL DESCRIPTION
THE SOUTHERLY 3,680 FEET OF THAT PORTION OF SECTION 31, TOWNSHIP 10 SOUTH, RANGE 8 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE UNITED STATES GOVERNMENT SURVEY APPROVED MAY 14, 1855, LYING WESTERLY OF A LINE WHICH IS PARALLEL WITH THE 600 FOOT DISTANT AT RIGHT ANGLES EASTERLY FROM THE WESTERLY LINE OF SAID SECTION.

REGIONAL CATEGORY
CT (COUNTY TOWN)

COMMUNITY PLAN
DESERT SUB-REGIONAL PLAN

GRADING QUANTITIES
CUT: 3,300 CUBIC YARDS
FILL: 1,200 CUBIC YARDS
EXPORT: 4,200 CUBIC YARDS

GRADING FOR ROADWAYS ONLY. NO GRADING OF RESIDENTIAL LOTS IS PROPOSED AS PART OF THIS APPROVAL.

FLOOD ZONE
F.E.M.A. FLOOD ZONE AO
DEPTH = 2 FEET
VELOCITY = 7 FPS
PER FEMA MAP 06073C0833 F

PARK LAND DEDICATION STATEMENT
THE SUBDIVIDER INTENDS TO COMPLY WITH THE PARK LAND DEDICATION ORDINANCE THROUGH THE PAYMENT OF FEES.

SOLAR ACCESS STATEMENT
SEE GENERAL NOTE 23.

BENCH MARK
3" STD. BRASS PLUG (CALTRANS) MARKED "DDPR 12 1986" AT NE CORNER OF PALM CANYON DR. AND HOBERG RD. ELEV. 745.884 DATUM: NAVD 88, NGS

ASSESSOR'S PARCEL NUMBER & TAX RATE AREA TABLE

ASSESSOR PARCEL NUMBER	TAX RATE AREA
141-080-05	08005

GENERAL NOTES

1. EXISTING ZONING: RS1 AND C42
2. PROPOSED ZONING: RS1 AND C42
3. GENERAL PLAN REGIONAL CATEGORY: CT
4. GENERAL PLAN DESIGNATION: NORTHERLY 2,740 FEET, **2**, RESIDENTIAL, MAXIMUM DENSITY 1 DU/ ACRE; SOUTHERLY 940 FEET, **26**, VISITOR SERVING COMMERCIAL.
5. TOTAL GROSS AREA: 164.1 AC., NET AREA: 44.78 AC.
6. TOTAL NUMBER OF LOTS: 18. 17 RESIDENTIAL LOTS AND 1 COMMERCIAL LOT.
7. TOTAL NUMBER OF RESIDENTIAL DWELLING UNITS: 17.
8. MINIMUM LOT SIZE PER ZONE: 1.00 AC. RESIDENTIAL/6000 SF. COMMERCIAL (SEE LOTS FOR GROSS AND NET AREAS)
9. CONTOUR INTERVAL OF 2 FEET (MEAN SEA LEVEL DATUM)
10. SPECIAL ASSESSMENT ACT PROCEEDINGS — NONE REQUESTED
11. IMPROVEMENTS, EASEMENTS AND DEDICATIONS ARE AS REQUIRED BY THE COUNTY ENGINEER
12. UTILITIES:
    A. SEWER – SEPTIC SYSTEMS PROPOSED
    B. WATER – BORREGO MUNICIPAL WATER DISTRICT
    C. GAS & ELECTRIC – SAN DIEGO GAS & ELECTRIC COMPANY
    D. TELEPHONE – AT&T/SBC
13. FIRE PROTECTION: BORREGO SPRINGS FIRE PROTECTION DISTRICT
14. SCHOOLS: BORREGO SPRINGS UNIFIED SCHOOL DISTRICT
15. ALL PROPOSED UTILITIES TO BE UNDERGROUND.
16. ALL EXISTING EASEMENTS NOT REMAINING IN USE SHALL BE ABANDONED PRIOR TO RECORDATION OF THE FINAL MAP(S) SUBJECT TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
17. EXISTING TOPOGRAPHY WAS COMPILED USING PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY, BY PHOTO GEODETIC CORP. DATED: 8/8/03.
18. THE FOLLOWING WAIVERS FROM THE SUBDIVISION ORDINANCE DESIGN STANDARDS ARE REQUESTED: NONE.
19. LAMBERT COORDINATES: 309-1853
20. DRAINAGE: STREETS & STORM DRAIN AS REQUIRED
21. ALL ONSITE ROADWAYS/DRIVEWAYS WILL BE PRIVATE.
22. STREET LIGHTS WILL BE INSTALLED TO COMPLY WITH THE REQUIREMENTS AS SPECIFIED BY COUNTY STANDARDS.
23. ALL LOTS WITHIN THIS SUBDIVISION HAVE A MINIMUM OF 100 SQUARE FEET OF SOLAR ACCESS FOR EACH FUTURE DWELLING/COMMERCIAL/INDUSTRIAL UNIT ALLOWED BY THIS SUBDIVISION.
24. THE PROJECT WILL BE RECORDED IN UNITS AS INDICATED ON THIS MAP.

OWNER/SUBDIVIDER
I HEREBY CERTIFY THAT I AM THE RECORD OWNER OF THE PROPERTY SHOWN ON THE TENTATIVE SUBDIVISION MAP AND THAT THE SAID MAP SHOWS ALL OF OUR CONTIGUOUS OWNERSHIP IN WHICH I HAVE ANY DEED OR TRUST INTEREST. I UNDERSTAND THAT OUR PROPERTY IS CONSIDERED CONTIGUOUS EVEN IF IT IS SEPARATED BY ROADWAYS, STREETS, UTILITY EASEMENTS OR RAILROAD RIGHT-OF-WAYS. I WILL COMPLY WITH THE PARK AND LAND DEDICATION ORDINANCE.

KBS DEVELOPMENT, INC. 401(K) RETIREMENT SAVINGS PLAN (DCD) 1180 KENT R. SMITH
8 KOPA'A STREET, SUITE 201
KAMUELA, HI 96769
TEL: (808) 572-3311
FAX: (808) 572-4078

BY: _____
KENT SMITH, TRUSTEE DATE:

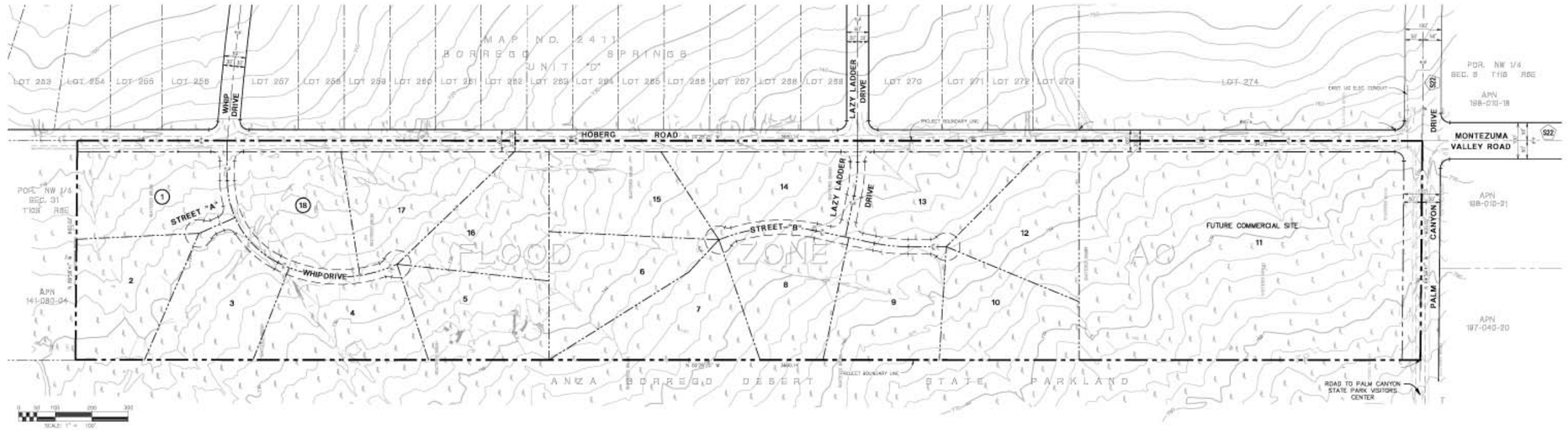
ENGINEER OF WORK
STEVENS CRESTO ENGINEERING, INC.
9665 CHESAPEAKE DRIVE, SUITE 320
SAN DIEGO, CA 92123-1362
PHONE: (858) 614-7650
FAX: (858) 614-7651

MARK C. STEVENS DATE
R.C.E. 39502

STEVENS-CRESTO ENGINEERING, INC.
CIVIL ENGINEERS - LAND PLANNERS - SURVEYORS
9665 CHESAPEAKE DRIVE PHONE: 858.614.5640
SUITE 320 FAX: 858.614.5641
SAN DIEGO, CA 92123-1362 www.zcengr.com

0 50 100 200 300
SCALE: 1" = 100'

SLOPE ANALYSIS
COUNTY OF SAN DIEGO TRACT 5511



STEEP SLOPE NOTE:

NO SLOPES IN EXCESS OF 25% GRADE AND GREATER THAN 50' IN HEIGHT EXIST ON THIS SITE THEREFORE A STEEP SLOPE ANALYSIS IS NOT REQUIRED

FLOOD ZONE NOTE:

THIS PROPERTY IS WITHIN FLOOD ZONE AO PER FEMA MAP 06073C0650 F

SLOPE ANALYSIS DATA

Color	Range Beg.	Range End	Percent	Area
	LESS THAN 15%		99.6%	50.5 AC.
	15%	25%	0.3%	0.2 AC.
	25%	50%	0.1%	0.0 AC.
	50% AND GREATER		0.0%	0.0 AC.
TOTAL:			100%	50.7 AC.

LEGEND

DESCRIPTION	SYMBOL
PROPOSED LOT NUMBER	1 THRU 18
SUBDIVISION BOUNDARY	
PROPOSED LOT LINE	
PROPOSED RIGHT-OF-WAY	
EXISTING RIGHT-OF-WAY	
PROPOSED EASEMENT LINE	
EXISTING CONTOUR	630

LEGAL DESCRIPTION

THE SOUTHERLY 3,000 FEET OF THAT PORTION OF SECTION 31, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE UNITED STATES GOVERNMENT SURVEY APPROVED MAY 14, 1895, LYING WESTERLY OF A LINE WHICH IS PARALLEL WITH THE 600 FEET DISTANT AT RIGHT ANGLES EASTERLY FROM THE WESTERLY LINE OF SAID SECTION.

BENCH MARK

3" STD. BRASS PLUG (CALTRANS) MARKED "BMPR 12 1968" AT NE CORNER OF PALM CANYON DR. AND HOBERG RD. ELEV. 765.694 DATUM: NAVD 88, NGS

OWNER/SUBDIVIDER

KBS DEVELOPMENT, INC. 401(K) RETIREMENT SAVINGS PLAN (DBO) TOD KENT R. SMITH
ATTN: KENT SMITH
1001 MAKAWAO AVENUE, SUITE 208
MAKAWAO, HI 96768
TEL: (808) 572-7211
FAX: (808) 572-8378

ENGINEER OF WORK

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MARK E. STEVENS
R.C.E. 35602

DATE

STEVENS-CRESTO ENGINEERING, INC.
CIVIL ENGINEERS - LAND PLANNERS - SURVEYORS
9665 CHESAPEAKE DRIVE, SUITE 320, SAN DIEGO, CA 92123-1352
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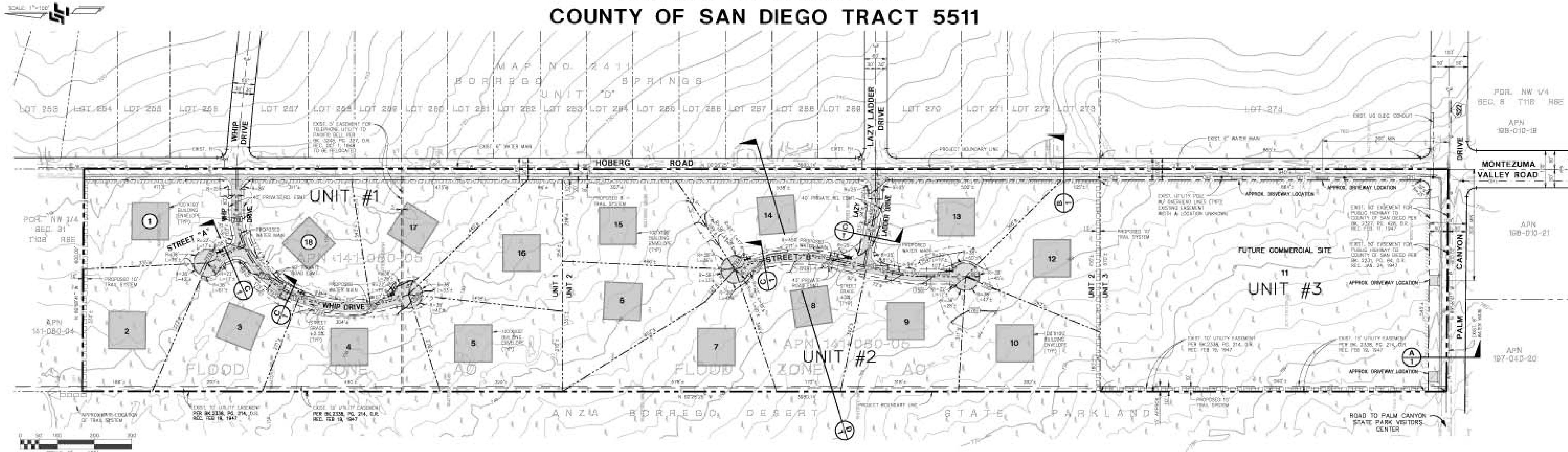
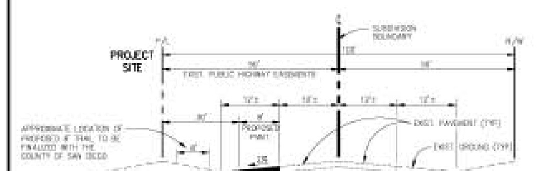
REVISIONS

PRELIMINARY GRADING PLAN
VESTING TENTATIVE MAP
COUNTY OF SAN DIEGO TRACT 5511

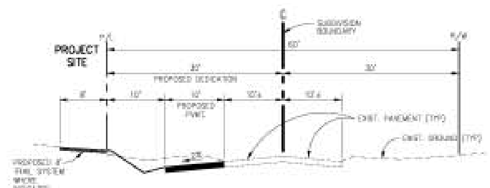




TYPICAL SECTION (PUBLIC)
PALM CANYON DRIVE

A/1

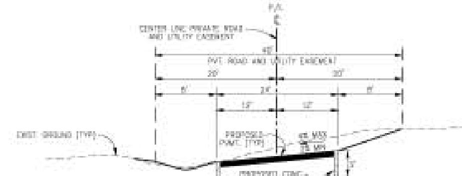
NO SCALE



TYPICAL SECTION (PUBLIC)
HOBERG ROAD

B/1

NO SCALE



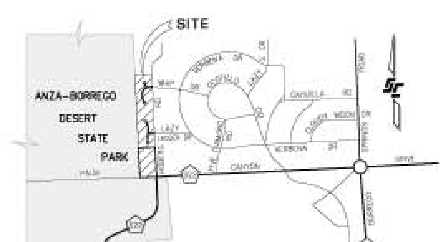
TYPICAL SECTION (PRIVATE)
WHIP DRIVE, STREET "A", "B", LAZY LADDER DRIVE

C/1

NO SCALE

NOTE

PAD GRADING IS NOT PROPOSED WITH THIS DEVELOPMENT, SEE SECTION D/1 BELOW. GRADING IS PROPOSED WITHIN THE PRIVATE STREET ONLY.



VICINITY MAP

NO SCALE

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE CURRENT SPECIFICATIONS AND STANDARD DRAWINGS OF THE COUNTY OF SAN DIEGO.

STANDARD SPECIFICATIONS:
1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREEN BOOK" (2003 EDITION), INCLUDING THE REGIONAL AND COUNTY OF SAN DIEGO SUPPLEMENT AMENDMENT.
2. SAN DIEGO COUNTY GRADING ORDINANCE.
3. CALIFORNIA DEPARTMENT OF TRANSPORTATION, " MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES," (1996 EDITION).
4. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS (JULY 2002).

STANDARD DRAWINGS:
1. THE CURRENT SAN DIEGO AREA REGIONAL STANDARD DRAWINGS.
2. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLAN (JULY 2004).
3. THE CURRENT WATER AGENCIES'S STANDARD DRAWINGS.

LEGEND

DESCRIPTION	SYMBOL
PROPOSED LOT NUMBER	(1) THRU (18)
SUBDIVISION BOUNDARY	
PROPOSED LOT LINE	
PROPOSED RIGHT-OF-WAY	
EXISTING RIGHT-OF-WAY	
PROPOSED EASEMENT LINE	
PROPOSED ACCESS RIGHTS RELINQUISHED	
EXISTING EASEMENT LINE	
EXISTING CONTOUR	630
PROPOSED CONTOUR	630
PROPOSED APPROX. 100'X100' BUILDING ENVELOPE LOCATION	
RUNOFF FLOW DIRECTION	
PROPOSED PAVEMENT	
PROPOSED WATER MAIN	
PROPOSED FIRE HYDRANT	
EXISTING WATER MAIN	
EXISTING FIRE HYDRANT	
EXISTING OVERHEAD UTILITIES W/ UTILITY POLE	OHL PP

GENERAL NOTES (PRELIMINARY GRADING)

1. THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSION/PERMITS BEFORE COMMENCING SUCH ACTIVITY.
2. THIS "PRELIMINARY GRADING PLAN" DOES NOT CONSTITUTE A CONSTRUCTION DOCUMENT. A FINAL GRADING PLAN, PREPARED (TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS) IN ACCORDANCE WITH COUNTY GRADING ORDINANCE SHALL BE SUBMITTED TO THE DEPARTMENT OF PUBLIC WORKS. APPROVAL OF THE FINAL GRADING PLAN SHALL BE REQUIRED AND GRADING PERMIT ISSUED PRIOR TO ANY WORK IN THE FIELD.
3. A CONSTRUCTION, EXCAVATION OR ENCROACHMENT PERMIT FROM THE DIRECTOR OF PUBLIC WORKS WILL BE REQUIRED FOR ANY WORK IN THE COUNTY RIGHT-OF-WAY.
4. ALL SLOPES OVER 3 FEET IN HEIGHT SHALL BE PLANTED IN ACCORDANCE WITH SAN DIEGO COUNTY SPECIFICATIONS.
5. A SOILS REPORT SHALL BE REQUIRED PRIOR TO THE ISSUANCE OF A GRADING AND/OR BUILDING PERMIT.
6. APPROVAL OF THESE PLANS BY THE DIRECTOR OF PUBLIC WORKS DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE PROPERTY OWNER'S PERMISSION HAS BEEN OBTAINED AND A VALID GRADING PERMIT HAS BEEN ISSUED.
7. THE DIRECTOR OF PUBLIC WORKS APPROVAL OF THESE PLANS DOES NOT CONSTITUTE COUNTY BUILDING OFFICIAL APPROVAL OF ANY FOUNDATIONS FOR STRUCTURES TO BE PLACED ON THE AREA COVERED BY THESE PLANS. NO WAIVER OF THE GRADING ORDINANCE REQUIREMENTS CONCERNING MINIMUM COVER OVER EXPANSIVE SOILS IS MADE OR IMPLIED (SECTIONS 87.403 & 87.410). ANY SUCH WAIVER MUST BE OBTAINED FROM THE DIRECTOR OF DPLU.
8. ALL SLOPES SHALL BE ROUNDED INTO EXISTING TERRAIN TO PRODUCE A CONTOURED TRANSITION FROM CUT OR FILL FACES TO NATURAL GROUND AND ABUTTING CUT OR FILL SURFACES.
9. NOTWITHSTANDING THE MINIMUM STANDARDS SET FORTH IN THE GRADING ORDINANCE AND NOTWITHSTANDING THE APPROVAL OF THESE PRELIMINARY GRADING PLANS, THE PERMITTEE IS RESPONSIBLE FOR THE PREVENTION OF DAMAGE TO THE ADJACENT PROPERTY. NO PERSON SHALL EXCAVATE ON LAND SO CLOSE TO THE PROPERTY LINE AS TO ENDANGER ANY ADJOINING PUBLIC STREET, SIDEWALK, ALLEY, FUNCTION OF ANY SEWAGE DISPOSAL SYSTEM, OR ANY OTHER PUBLIC OR PRIVATE PROPERTY, WITHOUT SUPPORTING AND PROTECTING SUCH PROPERTY FROM SETTLING, CRACKING, EROSION, SILTING, SCOUR OR OTHER DAMAGE WHICH MIGHT RESULT FROM THE GRADING DESCRIBED ON THIS PLAN. THE COUNTY WILL HOLD THE PERMITTEE RESPONSIBLE FOR CORRECTION OF NON-DEDICATED IMPROVEMENTS WHICH DAMAGE ADJACENT PROPERTY.
10. ALL GRADING DETAILS WILL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARD DRAWINGS: DS-8, DS-10, DS-11, D-75 UNLESS SHOWN OTHERWISE ON THESE PLANS.
11. SLOPE RATIOS: CUT – 2:1 FILL – 2:1. DEVIATING FROM THESE RATIOS WILL REQUIRE APPROVAL OF THE DIRECTOR OF PUBLIC WORKS AFTER REVIEW OF A REPORT FROM A SOILS ENGINEER.
12. EARTHWORK QUANTITIES:

CUT:	5,500 C.Y.
FILL:	1,200 C.Y.
EXPORT:	4,300 C.Y.

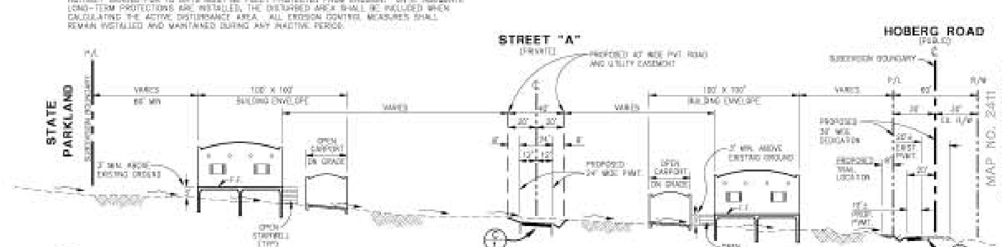
A SEPARATE PERMIT MUST BE OBTAINED FOR WASTE OR IMPORT AREA. GRADING QUANTITIES ARE APPROXIMATE AND ARE PROVIDED HEREON FOR PERMIT PURPOSES ONLY. QUANTITIES ARE BASED ON THE DIFFERENCE BETWEEN THE EXISTING SURFACES AND PROPOSED PAD/SUBGRADE SURFACES. VARIATIONS DUE TO LOSS FROM CLEARING AND GRUBBING, STRIPPING, SHRINKAGE, SWELL, UNSUITABLE MATERIAL & REMEDIAL GRADING ARE NOT CONSIDERED NOR FACTORED INTO THESE QUANTITIES. CONTRACTOR SHALL VERIFY QUANTITIES WITH THEIR OWN VOLUME CALCULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THEIR OWN INDEPENDENT QUANTITY AND MATERIAL TAKE OFFS AND CONSTRUCT THE DESIGN INDICATED ON THESE DRAWINGS. PROJECT TO BE BID BASED ON CONTRACTOR'S OWN ESTIMATES.
13. SPECIAL CONDITION: IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED ON THE SITE OF THIS GRADING DURING GRADING OPERATIONS, SUCH OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE DIRECTOR OF PUBLIC WORKS OF THE DISCOVERY. GRADING OPERATIONS WILL NOT RECOMMENCE UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE DIRECTOR OF PUBLIC WORKS TO DO SO.

EROSION AND SEDIMENT CONTROL MEASURES NOTES:

1. ALL UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF GRAVEL BAGS WITH A TOP ELEVATION TWO GRAVEL BAGS BELOW THE GRADED SURFACE OF THE STREET. GRAVEL BAGS ARE TO BE PLACED WITH LAPPED COURSES.
2. AFTER UTILITY TRENCHES ARE BACK FILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHT TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTER INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET.
3. ALL BUILDING PADS SHOULD BE SLOPED TOWARDS THE DRIVEWAYS AND VELOCITY CHECK DAMS PROVIDED AT THE END OF THE DRIVEWAY APRON OF ALL DRIVEWAYS DRAINING INTO THE STREET.
4. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS.
5. PROVIDE VELOCITY CHECK DAMS IN ALL STREET AREAS. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF GRAVEL BAGS, TIMBER, OR OTHER EROSION RESISTANT MATERIAL APPROVED BY THE COUNTY ENGINEER, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. VELOCITY CHECK DAMS MAY ALSO SERVE AS SEDIMENT TRAPS.
6. GRAVEL BAGS AND FILL MATERIAL SHALL BE STOCKPILED AT INTERVALS READY FOR USE WHEN REQUIRED.
7. ALL EROSION CONTROL DEVICES WITHIN THE DEVELOPMENT SHOULD BE MAINTAINED DURING AND AFTER EVERY RUNOFF PRODUCING STORM. IF POSSIBLE, MAINTENANCE CREWS WOULD BE REQUIRED TO HAVE ACCESS TO ALL AREAS.
8. ANY PROPOSED ALTERNATE CONTROL MEASURES MUST BE APPROVED IN ADVANCE BY ALL RESPONSIBLE AGENCIES I.E., COUNTY ENGINEER, DEPARTMENT OF SANITATION AND FLOOD CONTROL, OFFICE OF ENVIRONMENTAL MANAGEMENT, ETC.
9. PHYSICAL STABILIZATION THROUGH USE OF GEOTEXTILES, MATS, FIBER ROLLS (SS-7 OR ESC20), BONDED FIBER MATRIX OR OTHER MATERIAL APPROVED BY THE COUNTY FOR STABILIZING SLOPES, OR NOTE 15.
10. VEGETATION STABILIZING USING HYDROSEED (SS-4 OR ESC10) OR ACCEPTABLE LANDSCAPING MAY BE USED ONLY MAY 1 TO AUGUST 15. VEGETATION PROPOSED TO STABILIZE SLOPES MUST BE INSTALLED BY AUGUST 15, WATERED AND ESTABLISHED PRIOR TO OCTOBER 1. THE PROPERTY OWNER OR AUTHORIZED AGENT SHALL SHOW ON THE PLAN A CONTINGENCY PHYSICAL BMP TO BE INSTALLED BY OCTOBER 1 IF HYDROSEED ESTABLISHMENT DOES NOT OCCUR BY THAT DATE. IF LANDSCAPING IS PROPOSED, EROSION CONTROL MEASURES MUST ALSO BE USED WHILE LANDSCAPING IS BEING ESTABLISHED. ESTABLISHED VEGETATION SHALL HAVE A SUBSURFACE MAT OF INTERTWINED MATURE ROOTS WITH A UNIFORM VEGETATIVE COVERAGE OF 70 PERCENT OF THE NATURAL VEGETATIVE COVERAGE OR MORE ON ALL DISTURBED AREAS.
11. ALL MANUFACTURED SLOPES AND CLEARED SLOPES OF 3 TO 1 (HORIZONTAL TO VERTICAL) AND STEEPER ARE TO BE PROTECTED WITH A BMP APPROVED BY THE COUNTY OF SAN DIEGO, AS DESCRIBED IN NUMBER 14 ABOVE. CLEARED SLOPES FLATTER THAN 3 TO 1 MUST STILL BE PROTECTED FROM EROSION USING EITHER AN APPROVED BMP OR BY USING HYDROMULCH WITH A GUAR BINDER. FLAT AREAS OF LESS THAN 5% (LIKE BUILDING PADS, PARKING AREAS, LEACH FIELDS) SHALL HAVE 100% PROTECTION USING GEOTEXTILES, MATS (SS-7 OR ESC20), OR OTHER MATERIAL APPROVED BY THE COUNTY FOR STABILIZING SLOPES, OR USING TRACKING AND SOIL STABILIZERS/BINDERS (SS-5), TEMPORARY SEEDING (SS-4), MULCH/WOOD CHIPS (SS-3, SS-6, SS-8), OR JUTE MATTING (SS-7). THE COUNTY MAY REDUCE THIS REQUIREMENT FOR FLAT AREAS AND THE BELOW REQUIREMENT, PROVIDED FULL SEDIMENT CONTROL IS PROVIDED THROUGH CONSTRUCTED AND MAINTAINED DESILTATION BASINS (SC-2) AT ALL PROJECT DISCHARGE POINTS.
12. AREAS OF GRADED PADS THAT HAVE ACTIVE STRUCTURE CONSTRUCTION UNDERWAY MAY BE PROTECTED BY ROLLED PLASTIC AS PART OF A WEATHER-TRIGGERED ACTION PLAN UNTIL THE STRUCTURE'S ROOF HAS BEEN COMPLETED. THE REMAINDER OF THE PAD AREA MUST CONTINUE TO BE PROTECTED USING EROSION CONTROL MEASURES IDENTIFIED ABOVE.
13. UNPAVED ROADS ARE EXEMPT FROM THE 100% PROTECTION REQUIREMENTS BUT SHALL HAVE APPROPRIATE BMP'S INSTALLED SUCH AS GRAVEL BAG CHEVRONS.

ADVISORY NOTE ON STORMWATER OBLIGATIONS:

1. THE ACTIVITIES SHOWN ON THE PLANS ARE SUBJECT TO ENFORCEMENT UNDER PERMITS FROM THE SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD AND MUST ALSO COMPLY WITH THE REQUIREMENTS OF THE SAN DIEGO COUNTY MUNICIPAL STORM WATER PERMIT. THIS INCLUDES REQUIREMENTS FOR MATERIALS AND WASTES CONTROL, EROSION CONTROL, AND SEDIMENT CONTROL ON PROJECT CONSTRUCTION SITES. THE PERMITTEES OF OPERATIONS SHOWN ON THESE PLANS ARE OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORM WATER REGULATIONS AT ALL TIMES. THE PERMITTEE SHALL ALSO KEEP A COPY OF THE SWPPP (STORM WATER POLLUTION PREVENTION PLAN) ON SITE AND AVAILABLE FOR REVIEW BY COUNTY.
2. DURING THE RAINY SEASON THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY THE PROPERTY OWNER OR AUTHORIZED AGENT IN THE EVENT OF A RAINSTORM. 125% OF ALL SUPPLIES NEEDED FOR BMP MEASURES SHALL BE RETAINED ON THE JOB SITE IN A MANNER THAT ALLOWS FULL DEPLOYMENT AND COMPLETE INSTALLATION IN 48 HOURS OR LESS OF A FORECAST RAIN.
3. NO AREA BEING DISTURBED SHALL EXCEED 50 ACRES AT ANY GIVEN TIME WITHOUT DEMONSTRATING TO THE SAN DIEGO COUNTY DPW DIRECTOR'S SATISFACTION THAT ADEQUATE EROSION AND SEDIMENT CONTROL CAN BE MAINTAINED. ANY DISTURBED AREA THAT IS NOT ACTIVELY GRADED FOR 10 DAYS MUST BE FULLY PROTECTED FROM EROSION. UNTIL ADEQUATE LONG-TERM PROTECTIONS ARE INSTALLED, THE DISTURBED AREA SHALL BE INCLUDED WHEN CALCULATING THE ACTIVE DISTURBANCE AREA. ALL EROSION CONTROL MEASURES SHALL REMAIN INSTALLED AND MAINTAINED DURING ANY INACTIVE PERIOD.



TYPICAL SECTION

D/1

NO SCALE

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REVISIONS
△
△
△

LEGAL DESCRIPTION

THE SOUTHERLY 3,880 FEET OF THAT PORTION OF SECTION 31, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE UNITED STATES GOVERNMENT SURVEY APPROVED MAY 14, 1885, LYING WESTERLY OF A LINE WHICH IS PARALLEL WITH THE 600 FEET DISTANT AT RIGHT ANGLES EASTERLY FROM THE WESTERLY LINE OF SAID SECTION.

BENCH MARK (BASIS OF HORIZONTAL AND VERTICAL CONTROL)

2" STD. BRASS PLUG (CALTRANS) MARKED "SDPB 12 1985" AT NE CORNER OF PALM CANYON DR. AND HOBERG RD.
ELEV. 785.884 DATUM: NAVD 88 NGS

OWNER/SUBDIVIDER

KRS DEVELOPMENT, INC. 401(K) RETIREMENT SAVINGS PLAN (002) FBO KENT R. SMITH
ATTN: KENT SMITH
8 KOPA'A STREET, SUITE 201
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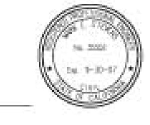

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